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THEY TOO - PRODUCE FOR VICTORY

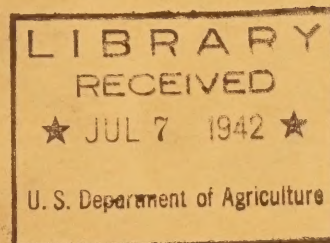
Summarized from Annual Reports of Twenty
Farm Security Administration Farm and Home Supervisors

By

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Washington, D. C.
March 1942

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INTRODUCTION

Production is the keynote in agriculture in wartime. To produce to keep America healthy and strong and to help feed its allies means that every farm family is called upon to do its part. Increased production by farm families is imperative. Yet to increase production requires skills, equipment, capital, and productive land which many farm families do not now have, so they are unable to make that kind of contribution to the Nation's war effort. It is this kind of underprivileged family that is being assisted by the FSA, through the development of a rehabilitation program so that eventually they may be mobilized for active duty in helping to feed mankind at the same time that they are advancing toward self-support and great production efficiency.

The 500 families participating in the special project, which is the subject of this report, were originally unable to qualify for assistance under regular FSA programs. This experiment in rehabilitation began in 1938 and has been conducted in 10 counties in 9 States. This report summarizes the activities of families participating in the program from the time of its inception in March 1938 to March 1941. In the experiment, mental or physical disabilities of such a nature as to preclude rehabilitation were the only reasons for excluding a family in need of assistance. These families were the subject of the report called "Five Hundred Families Rehabilitate Themselves", issued in February 1941.

Before taking part in the program, the majority of these project families were dependent on some form of relief. Isolated, without any plans for the future, they lived a hand-to-mouth existence, gradually succumbing to a feeling of inadequacy which in many instances resulted in their being over-aggressive or belligerent.

Today, they are a different people. Out of their experiences since coming on the program in 1938 they have begun to develop a new philosophy of living - one which demands activity instead of inertia, cooperativeness instead of aggressiveness, accomplishments instead of complaints, and self-reliance instead of dependence. The progress they have made is outstanding - material possessions have been improved and increased, and greater opportunities for personal and social development have been attained.

At the time these families came into the program their resources were extremely limited. They lacked sufficient land, equipment, capital,

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and managerial ability to carry out a sound farm program. Outside employment, once relied upon to supplement meager farm income, had either disappeared or had become too limited to supply enough cash to cover living expenses. In planning rehabilitation it was necessary, therefore, to strengthen natural resources, develop new sources of income, reduce cash expenditures, and provide additional services. To do this the following phases of work and activities have been emphasized:

- (1) Reduction of cash expenditures by growing more products for home use, feed for livestock, and seeding purposes; and making more effective use of family labor and native materials.
- (2) Promotion of educational activities.
- (3) Development of new sources of income and expansion of old.
- (4) Improved land use and conservation practices.
- (5) Better tenure arrangements.

NEGLECT IS BEING REPAIRED

Freedom from want is based on production, and so on the cultivation of the soil from which food is derived. Because neglect to feed and repair undernourished and damaged soils can seriously cripple efficient food production, America's soils must be safeguarded from shortsighted exploitation. As the call for increased production becomes urgent, preserving the fertility of our soils and reclaiming unused and impoverished land through good land use practices becomes urgently important.

The part that project families are playing in restoring land to productive use is significant. A lack of sufficient and productive land was a problem common to most of these families at the beginning of the so-called noncommercial program. The reason for these problems varied in the different counties. For example, the acuteness of the land problem in Knox County, in Kentucky, resulted not only from misuse but also from continued subdivision of farms to help young people who were trying to start on their own, near the parental home. Some farms that once supported only one family must now support from six to eight.

What happens when families multiply while the land area remains the same and is robbed of its original fertility can be illustrated in the case histories of two borrowers - John Doe and Richard Roe. Forty years ago John and his wife lived on a 300-acre farm, of which approximately 60 acres were tillable. Now the elder Does and the families of their 3 sons and 3 daughters and 4 other tenant families - a total of 42 persons - are to be supported on the same piece of land on which John and his wife once lived alone. Richard Roe's grandfather came from North Carolina to Knox County soon after the Civil War. He bought a large tract and was considered a prominent and wealthy man who maintained a high standard of living. He traded livestock, sold timber from the hillsides and farmed the rich bottomland. He had a large family and his children had large families - until at present there are more than 50 progeny that must somehow try to wrest a living from the land that has been divided, subdivided, and neglected during the last hundred years. With each rain the denuded hillsides, robbed by Grandpa Roe of their soil-holding trees, poured their topsoils into the bottomland. This choked and clogged the creeks, causing them to overflow and to zig-zag and cut across the bottomland in such a meandering fashion as to cut large fields into small strips. After a while the Roes, like the rest of the families in this area, abandoned the bottomland that had become too wet for cultivation and began to cultivate the exhausted hillsides. When the worn-out soil failed to reward the families' efforts with good crops, like the soil, they too became poorer and poorer each year.

Rebuilding and reclaiming the land under the direction of the F.S.A. meant a complete about-face in farming methods. The families in the selected area had to make a concerted effort to establish an effective drainage system. The wet swamp land had long been recognized as a menace to the welfare of the people but nothing had been done about it because the individual land owners had not been able to work simultaneously on widening, deepening, and straightening the stream channels.

Since the beginning of the program approximately 400 acres of this useless swampland has been brought into cultivation. At least 85 percent of the land had to be cleared of swamp alders and other bushes, extensive grubbing and scrubbing had to be done, choked creek channels were cleaned, and approximately 35,000 feet of open and covered ditches were constructed. This work was all done by the borrowers, at little or no cost.

Practically all of this land has also been basically treated and is now producing good crops of corn, Lespedeza, red clover, and other products. For example, as a result of swampland reclamation one operator last year harvested 15 tons of good hay from the same bottomland from which he had before cut less than 3 tons and that was of such poor quality that his livestock did not want to eat it. After receiving basic soil treatment, land on which he previously could scarcely grow corn, is producing more than 40 bushels per acre. Many hillside fields heretofore used for cultivated crops have been seeded to pasture and the cultivated crops are now grown on the level bottomland. Last year, the 100 noncommercial families seeded more land to cover crops than had been seeded over the entire county in any previous year. For every acre of land in cover crops in 1938 there were 100 acres in 1941.

In Grayson County, in Virginia, a special effort has been made to improve the soil which is low in lime content and organic matter. Twenty-five families in this County bought 123 tons of lime which was spread over 115 acres of land. Noticeable improvement in both quantity and quality of crops has resulted.

The following methods in land improvement have been introduced in San Miguel County, in New Mexico: 36 borrowers are planting sweetclover on the more unproductive land to be used as a green pasture crop; 7 families are using commercial fertilizer; 43 operators are using barnyard manure on their gardens and as much other land as possible. None of these families had ever used manure as a fertilizer before the inception of the program. Deeper plowing had been introduced and every family has the use of larger plows than previously used. Practically every borrower in this County is employing one or more land and range conservation practices, such as spreader ditches, gully plugging, building stock tanks on dry land, using additional fences for range control in compliance with AAA program, and terracing. The river-control work which involves the construction of rock-and-brush diversion dams from time to time - first on one side, then on the other - is participated in by all members of the community, to prevent good soil from the river banks being cut away and carried down the stream. A 6-year crop rotation has been worked out for each family.

The importance of soil-building crops has been stressed at group meetings in Laurens County, in Georgia. Thirty families in this county grew Austrian winter peas during the fall in 1939 and in 1940, and 27 now have their third crop. The beneficial effects of this crop have been increasingly noticeable, especially during the extended drought last year - the extent of damage to corn that followed Austrian winter peas was considerably less than in previous drought periods when the peas were not planted.

Soil-conservation practices have been strongly emphasized in Mercer County, in West Virginia. At the time one borrower came on the program, his farm was very badly eroded; it had worn away until only 15 percent of the top soil was left. Some of his land has a slope of more than 40 percent, but by using very narrow strips on the contour, he is rapidly rebuilding the soil and is at the same time producing good feed crops without any harmful results. He has limed some of the land each year and carried out a 3-year rotation, consisting of corn, wheat, and mixed hay of clover and timothy. This farm was visited in April 1940 by the Dean of the State Agricultural College who said that the growing of such fine crops on 85 percent subsoil without harmful effects was most unusual and very significant. Last year the owner of this farm was asked how long it had been since as much hay and roughage had been grown on this land. He replied, "My father grew as much in 1915."

Another borrower with very little experience in farming has done remarkably well in building up his land. In 1940 he planted soybeans, strip-cropped 12 acres of land, followed a crop-rotation system, and participated in the ACP program. He also used a considerable quantity of lime and cleared several acres of pasture land.

Fully 90 percent of the noncommercial F.S.A. farm families in this county have participated in the AAA program; they have received superphosphate and payment for planting and turning under green manure crops.

Practically all the farms in Orange County, in Vermont, were in a run-down condition at the inception of the program. Since then the SCS has mapped and laid out two farms for demonstration purposes. Most of the project families have been quick to put into practice the advantages of methods demonstrated on the experimental farms. There has been a marked increase in the production of all forage crops and each borrower is participating in the ACP.

At the beginning of the program in Reynolds County, in Missouri, no terraces, pasture furrows, contours, nor strip-cropping were observed in the county. They are now evident and project families are using these and other land-improvement and conservation methods to a much greater extent than are most other farmers in the county.

A STEP TOWARD SECURITY

The productive efficiency and the morale of underprivileged farm families can be increased if these families can attain certain physical, social, and personal anchorages on which they may depend for security. Improved tenure arrangements have played an important part. Improvements have been achieved not only by those renting land; families buying farms on a contract basis and those whose farms were heavily mortgaged have been able to affect more satisfactory financing adjustments since coming into the program.

The noncommercial F.S.A. families in Laurens County, in Georgia, are pioneers in long-time lease arrangements. Before this program was started, a tenant family usually began looking for another farm to rent as soon as it had finished harvesting its season's crops. Whether these families were driven by a desire to better themselves or whether they moved merely from force of habit, the fact remains that they were seldom if ever benefited by the change. Since the program started, 22 project families have secured 5-year leases and 13 others have leases of 2 or 3 years duration. The most important improvements in tenure have been effected by a change from the old established share-crop arrangement to cash renting. Noticeable benefits that may be said to have come from improved land tenure in this country are as follows:

- (1) Increase in school attendance.
- (2) Decrease in number of farm changes each year (ascertained through reports which show considerable decrease in number of requests for name changes on work sheets from former years).
- (3) Increased tendency among small operators to adhere to all practices that will increase AAA allotments - in each case this indicates an intention to remain on the farm in later years.
- (4) Increased consciousness by landlored of the benefits of long-time leases. Each year there is less difficulty in getting landlords to sign long-time leases. Landlords who previously refused to rent to project families now come to the FSA office asking the supervisors to help them to get these same families as tenants. To illustrate: When the initial loan was made to one borrower, he found it impossible to rent a farm in the community in which he had always lived. In addition to refusing to rent to him, some landowners also used their influence to prevent him from getting a farm from their neighbors because they considered him an undesirable neighbor. After being on the program 1 year and living on a farm 15 miles away, this borrower obtained a 5-year lease on a desirable farm back in his home community and now commands the respect of all his fellow citizens.

In Thurston County, in Washington, where project families were buying real estate on a contract basis, several owners agreed to give deeds and take first mortgages. In a few cases, a timber company changed the contracts and extended them over a longer period. One operator was able to make a contract to purchase a 40-acre farm by agreeing to turn over the proceeds above house expenses from 2 acres of berries as a down payment and to thereafter maintain 2 acres of berries on the same basis for each year's payments.

Tenure arrangements in San Miguel County, in New Mexico, are of minor importance, owing to the lack of renters; there is only one in the project area. Most of the families own very small tracts of land. The custom has always been to rent, by verbal agreement, additional land from some neighbor who is away working in sheep camps, beet fields, or mines. As the owner does not know when his distant job may terminate, he reserves the right to return to his land at any time, although he will carry out his verbal agreement with the tenant for that crop year. Under these circumstances, the supervisors think that lease arrangements should not be such as to force the owner's absence from his farm, which is also his home, as this would be rehabilitation of one low-income family at the expense of another. As the tenant already owns his small plot of land and home in the area, tenure is not disrupted.

In Reynolds County, in Missouri, improvement in tenure has been effected by helping tenants to become land owners. Land is extremely cheap, especially wild land, which can be bought for from \$3 to \$10 per acre, depending upon ownership rather than upon the actual value. Much of it is owned by large timber companies who consider it worthless now that the timber has been removed. One borrower bought 103 acres, mostly cleared and fenced, at a 1940 tax sale, for \$25. Another bought 160 acres of very promising wild land for \$100. These represent many similar cases. The supervisors believe that this land is as good as or better than much of the land now being farmed there, excluding creek and river land. Experiments made since the program started indicate that this kind of land can be built up to support families living in this area.

In Knox County, in Kentucky, the supervisors have experienced little difficulty in getting suitable leases for renters. This is due principally to the fact that most project borrowers rent land from relatives and in most cases will eventually inherit the land on which they now live. But some of the tenants rent from landlords who are not relatives. Improved tenure arrangements in some of these cases are noteworthy. In one instance, the landlord bought a farm that badly needed improvement. The project supervisor arranged with him to lease the land to a noncommercial borrower. After the program was explained to the landlord he agreed that if the tenant would carry out the land-improvement program suggested by the farm and home supervisors, he would furnish materials to build a new house and barn and the tenant could have all he could make on the farm for 5 years, receiving as rent the AAA payments, to be earned by the tenant.

In another instance the landlord agreed to furnish materials to build a poultry house, repair the barn, and construct a storage house, provided the tenant furnished the labor. He further agreed to furnish part of all basic soil-treatment materials, seed for cover crops for all cropland, and necessary fencing for the farm. He also supplied a disk harrow, a mowing machine, and a hay rake. The tenant, on the other hand, agreed to do as much ditching as necessary to drain 3 acres of land properly, and to grub off all hill land, cultivate it 1 year, and then seed it to pasture. In addition, the tenant was to give one-third of all grain and hay as rent, during the 5-year period, receiving for himself all pasture and any truck crops grown on the farm. Before the end of the first year, the landlord made the following statement: "While it might look to some that J. W. is getting the long end of the deal, my farm is now worth a thousand dollars more than it was when he moved on it less than 12 months ago." Observing the improvements effected on this farm, an adjacent owner who had previously refused to rent to this borrower came to FSA office saying, "How about you folks helping me find a renter like J. W. - I never would uh thought he'd turn out to be such a fine farmer; I shore made a mistake by not renting to him when he tried to get me to."

Families renting land in Mercer County, in West Virginia, had never used written leases before coming into the program, but now leases covering a period of at least 1 year with a renewal clause are used by all of the F.S.A. clients in that county.

Considerably more interest in all improvements is being shown by landlords since the beginning of the program in Grayson County, in Virginia. They have improved dwellings and other farm buildings, built storage houses and sanitary toilets, furnished larger and better gardens, and supplied lime, free pasture for subsistence livestock, and employment for laborers.

The flexible farm lease has been used by all project tenants in Orange County, in Vermont, and Mercer County, in West Virginia. In Orange County, one renter has a lease dated in 1939 that was written for a 10-year period. It calls for the payment of 6 years' rent in advance with the opportunity of buying the farm at the end of 3 years - the advance rent to be applied to the purchase price. Other leases have been written which require that the rent be paid in monthly or quarterly payments. In still other cases, repairs have been made in lieu of rent for the first year. Most of the leases contain an option to purchase any time during the period of the lease. Families with mortgaged farms have also benefited. For example, a mortgage on one farm was rewritten, cutting the interest rate from 6 percent to 4 percent, and discounting \$100 in delinquent interest. This was accomplished by improving the farm buildings. Another borrower bought a farm, with no down payment, for \$800 at 4 percent and payment of \$25 per year on the principal. When the sum of \$400 has been paid on the principal, the deed will be given to him and the mortgage taken for the balance. Still another borrower bought a farm from a bank and was given the deed; no down payment was required and payments are to be made from the sale of lumber cut from the farm.

No difficulty has been experienced in using written leases in Beltrami County, in Minnesota, but as cropland for rent is becoming more scarce the land rents are being raised.

INCREASED PRODUCTION

In the effort to increase production, the potentiality of the low-income farmers who previously contributed little toward providing food even for themselves should not be overlooked. Just how effective this kind of family can be in their production efforts, if provided with equipment and guidance, is illustrated by results attained by project families in all counties in which the experiment is being conducted. According to progress records covering crop years 1938-39, 1939-40 and 1940-41, the capacity of these families to produce food for themselves and for others has consistently increased. Since their first crop year on the program, the production of food by each group of project families in the different counties has increased as much as 50 percent, and in several counties the production of some products has increased as much as 900 percent. Before they began to participate in the program, many of these families had never had a garden, and most of those gardens grew only a limited quantity and variety of products. No family had adequate canning equipment, and only a few knew how to can properly to avoid spoilage. It was necessary, therefore, to stress increased production and food storage, provide necessary equipment, and conduct canning demonstrations. During the 1940-41 crop year, every project family in the 10 different experimental areas either owned or had access to a pressure cooker; and a representative of each of these families attended a canning demonstration or was given individual instruction, so canning and preserving records have naturally increased.

The 50 project families living in Laurens County, in Georgia, canned an average of 44 quarts per family in 1938, 275 quarts in 1939, and 413 quarts in 1940 (an increase of 839 percent since the first year of the program in 1938.) The average quarts per person among these families increased from 8 in 1938 to 45 in 1939, and to 72 in 1940. In 1938 only 61 bushels of dry peas and butterbeans were gathered; in 1939, this production was stepped up to 317 bushels, and in 1940, to 533. Whereas these families had only 531 hens in the fall of 1938, they had 1,690 hens, 198 fryers, and 450 broilers in the fall of 1939, and in 1940 these figures had increased to 1,809 hens, 267 fryers, and 560 broilers. Each of these families had a winter as well as a summer garden during the 1940-41 year, whereas, during the last year before coming on the program only 13 out of the 50 families made any attempt to grow a garden and only one of these planted more than two vegetables. During the 1940-41 year all 50 families planted 10 or more vegetables.

Aside from increasing the quantity and variety of home-produced food, these families have learned to prepare better balanced meals. Pressure cookers are used in preparing meals during the rush-work season so that the families now have a vegetable dinner to replace a "hurried fried snack." Baked dishes, using milk, butter and eggs, have been added. Every homemaker has attended a bread-making demonstration and is now able to make more wholesome bread - graham muffins, corn-meal muffins, and rolls - to replace the fried breads formerly used.

The 50 project families in Oglethorpe County, in Georgia, increased their production of food from an average of 24 quarts per family during the last crop year before coming on the program, to 240 quarts per family during the 1940-41 year (900 percent increase.) During the 1940-41 crop year, ~~most~~ of these families who had ~~not~~ usually never stored food before, put away an average of 17 bushels of potatoes, 11 pounds of dried fruits, 18 gallons of sirup, 79 pounds of dried beans and peas, and 531 pounds of meat, as compared with 106 pounds of meat in 1938. The value of food stored by the group was approximately six times as great during the 1940-41 year as during the year before they entered the program. In 1938 approximately three-fourths of these families were without milk cows; in 1941 all the families own one or more - the average number is 2.1. The number of chickens owned by these families has increased by more than 50 percent.

A noticeable increase has taken place in the variety of vegetables grown by project families in Knox County, in Kentucky. For example, one family that raised only onions, potatoes, cucumbers, and beans in 1938, had this year (1940), greens of all kinds, head lettuce, cabbage, Chinese cabbage, sweet corn, cauliflower, broccoli, soybeans, carrots, parsnips, turnips, sweet potatoes, eggplant, endive, kohlrabi, okra, peppers, cucumbers, parsley, peas, and celery. This family will furnish other families on the project with broccoli and cauliflower plants next year.

Outstanding progress has also been made in the preservation of food in this county. A family of six increased its supply of vegetables from 66 quarts during the crop year before coming on the program, to 176 quarts during the 1940-41 crop year, tomatoes, from 21 to 109 quarts; and fruits from 42 to 177 quarts. It decreased the quantity of sweet potatoes canned from 107 to 79 quarts, and pickles from 110 to 88 quarts. Thus the total number of quarts canned was increased more than 50 percent and the variety was much better. The foods canned during the 1940-41 year included beans, tomatoes, tomato juice, cabbage, corn, lima beans, soup mixture, carrots, okra, peas, beets, mustard, poke green, sweet potatoes, squash, pears, apples, peaches, blackberries, huckleberries, strawberries, grapes, and cherries. (It is still difficult to keep the families from filling their jars with pickled beets, cucumbers, and relishes of all kinds.)

The quantity of lean meat consumed by families in this county has greatly increased. The production of beef and mutton for home uses during 1940-41 year was 300 percent greater than the quantity produced during the previous crop year. Milk consumption has increased at least 50 percent, not entirely because of an increase in the number of cows, but also because cows of a better quality have been purchased and they have been better fed and cared for.

Since the program started in Beltrami County, in Minnesota, the quantity of fruits and vegetables canned has increased 44 percent, and the amount of meat canned and cured has increased 98 percent. The extent to which the project families in this county have increased their consumption of fresh home-produced foods is shown in the following table:

Table 1.—Average number months home-produced food was consumed during a specified period, Beltrami County, Minn.

| Milk | : | Butter | : | Eggs | : | Green Veggies. | : | Other Veggies. |
|------------------|---|------------------|---|------------------|---|------------------|---|------------------|
| 12 mos.: Past | : | 12 mos.: Past | : | 12 mos.: Past | : | 12 mos.: Past | : | 12 mos.: Past |
| prev. : 12 | : | prev. : 12 | : | prev. : 12 | : | prev. : 12 | : | prev. : 12 |
| to loan: months: | : | to loan: months: | : | to loan: months: | : | to loan: months: | : | to loan: months: |
| 3.2 | : | 11.6 | : | 5.3 | : | 10.3 | : | 3.3 |
| 8.4 | : | 4.9 | : | 7.0 | : | 6.8 | : | 10.5 |

Note: Fresh food only — canned food not included.

Families have been encouraged to have fall and summer gardens and to plant perennial vegetables and small fruits to provide for a 12-month supply. The planting of perennial vegetables is especially important in all areas where the growing season is short. For example, if the families in Beltrami County have asparagus, winter onions, and several other less commonly used perennial vegetables, variety is added to their menus, and they are able to have fresh vegetables much earlier in the season. Only two borrowers in this area raised asparagus before they had F.S.A. loans; now 16 of the 43 families have asparagus beds and perennial onions. Therefore, only 10 of the families raised strawberries, and 12 raspberries, whereas, now 39 are raising strawberries, and 29 are producing raspberries. The number raising rhubarb has almost doubled during the last two years.

At least four new vegetables have been introduced in Reynolds County, in Missouri, — chma, Chinese cabbage, salad, and Swiss chard. Food production and preservation increased considerably during the last year.

Table 2.--Production of food by project families in Reynolds County, Mo.

| Item | 1939 | 1940 |
|---|--------|--------|
| Families reporting | 45 | 41 |
| Individuals | 241 | 225 |
| Families that reached canning quota | 2 | 2 |
| Families canning 80 quarts per person | 28 | 31 |
| Average number quarts canned per person | 92 | 120 |
| Total number quarts canned | 22,148 | 26,831 |
| Tomatoes and tomato juice (quarts) | 2,833 | 2,851 |
| Greens and green beans (quarts) | 6,787 | 4,034 |
| Other vegetables (quarts) | 2,324 | 6,213 |
| Fruits and fruit juices (quarts) | 7,187 | 10,203 |
| Meat (quarts) | 461 | 1,236 |
| Pickles and jellies (quarts) | 2,556 | 2,294 |
| Potatoes stored (bushels) | 818 | 565 |
| Fruits and vegetables stored (bushels) | 201 | 166 |
| Beans and peas stored (pounds) | 1,093 | 1,853 |
| Dried fruits stored (pounds) | 95 | 83 |
| Sorghum and honey stored (gallons) | 165 | 295 |

During the 1937-38 crop year, these families canned a total of only 6,054 quarts of food as compared with 26,831 quarts during the 1940-41 crop year, an increase of approximately 350 percent. One family who did not can any food the year before it came into the program, was awarded first prize last year in a county-wide canning contest. They canned a total of 1,686 quarts of food. The previous canning experience of this family was described by the father as follows:

"Before we came on the program I used to allers go to town in the spring and buy two or three little packages of bunch beans and a few onion sets to plant, so we could have a little to eat during the summer garden season. We never had any beans left to can after we got through eat'n off 'em. We'd allers plan to have cornfield beans to can later, but somehow the drought or something allers got 'em, and we ended up by not having any. When we first come on the program, we signed up fer a garden package, like the supervisor recommended, and when we got it we opened it up and I'm telling you we never seen so much seed and stuff. There wuz 'bout 3 gallons of all sorts of beans and a whole lot of potatoes and such a mess of other seed you've never seen. It looked to us like there wuz enough seed for the whole community. I told my wife I thought they'd made a mistake or else they expected us to eat part of 'em; so we decided I better go to town and see the supervisor before we did anything with 'em. Well sir, when I got there they told me for a family of seven, like I had, that wasn't too much seed to plant. When I went back and told the wife and children we had a lot of fun joking about what in the world we'd ever do with all the food

we'd raise from the seed. We gathered 30 big lard cans full of green beans that year. We canned and canned all sorts of stuff and never had so much to eat in all our lives. My wife used to fuss 'bout cooking. She'd say, 'Well what am I gonna cook when there ain't nothin' to cook?' We never had any too much to eat any time, but there was 5 months before we got on the program that we had nothin' but cornbread and turnips - no sugar, coffee or nothin'. My grown daughter took cold cornbread without anything to eat with it to high school for her lunch. Now by golly we can go to the storage house and take our pick of jist about anything abody could think of to eat. We've got 'bout six or eight kinds of meat, such as pork, mutton, beef, squirrel and chicken, all kinds of vegetables, soups, berries, relishes, sweets, and fruits and fruit juices, besides all our dried and stored stuff. One time several years ago, I recollect readin' in a paper how to can corn. We'd never had any luck trying to can, but the way it read, it sounded fine; so we just went crazy and tried to can all the corn we could lay our hands on - 100 quarts in all. Well sir, you know ever plaggd one of them cans spoiled. It is shore a pleasure to can things now that we have our pressure cooker and know when you work to do it they ain't gonna spoil. If you wuz to offer me \$500 for our pressure cooker and I knowed I couldn't git another one, I wouldn't sell it."

Much interest has been developed regarding the production and preservation of foods in San Miguel County, in New Mexico. Considering the fact that only three women in this county knew how to operate a pressure cooker at the beginning of the program, it is evident that outstanding progress has been made for during the last canning season, 34 homemakers completed their canning budget, 11,054 containers of food were preserved which included 5,510 jars of vegetables, 5,829 jars of fruit, and 720 jars of meat. In addition, 16,701 pounds of fresh and dried vegetables were stored. The production of wheat, corn, beans, and chile was doubled during the past year; 8 families produced their entire supply of wheat flour and 16 others produced about 50 percent of their yearly supply. Expenses of commercial cereals have been curtailed. At a local mill, wheat is converted into whole-wheat cereal and corn is ground to supply the different grade of corn meal used for mush, tortillas, and tamales.

The extent to which food production, preservation, and storage have been stepped up in Orange County, in Vermont, is illustrated as follows:

Table 3.--Increase in food production, preservation, and storage in Orange County, Vt.

| Foods | Date | |
|----------------------------------|----------------------|-------|
| | Prior to acceptance: | 1940 |
| | on program | |
| Canned tomatoes (quarts) | 296 | 417 |
| Canned vegetables (quarts) | 1,400 | 2,646 |
| Canned fruits (quarts) | 929 | 1,891 |
| Pigs butchered (numbered) | 7 | 35 |
| Cattle and/or calves (number) | -- | 20 |
| Poultry (pounds) | 188 | 1,204 |
| Root vegetables stored (pounds) | 31 | 115 |
| Green vegetables stored (pounds) | 275 | 2,085 |
| Squash stored (pounds) | 410 | 3,023 |
| Dry beans (bushels) | 24 | 35 |
| Fruit stored (bushels) | 49 | 89 |
| Potatoes (bushels) | 629 | 1,461 |
| Salted greens (gallons) | -- | 58 |
| Dried fruits (pounds) | -- | 25 |

As a result of increased home production of foods, the amount formerly spent for staple products has been greatly reduced, while the variety of foods used has increased. This was particularly true in Orange County in regard to the fish. In the past, it had been little used, because of difficulty in buying fresh fish. The use of frozen fish was recommended because that it is inexpensive. It is now bought by the families on a cooperative basis in large quantities.

Food production in Grayson County, in Virginia, has increased approximately 75 percent. There was less increase (30 percent) in the consumption of lean meat than any other food for which records were kept. For years these families have been selling their lean meat in order to buy what they believed to be necessities and it is difficult for them to break away from this practice.

Since the inception of the program in Thurston County, in Washington, the quantity of fruits and vegetables canned by project families has increased from 30 quarts per person during the 1937-38 year to 100 quarts per person among the F.S.A. clients during 1940-41. The exchange of surplus fruits and vegetables among the project families in this county, along with an increase in the size of their gardens, and the introduction of a greater variety of fruits and vegetables has enabled them to increase their inventory until now at least 90 percent have an adequate supply. There has been considerable conflict in the early spring between the cultivation of strawberries and the cultivation of the family garden. Strawberries represent cash income, and it is difficult for most families

to think that the garden is equally important. The families are being encouraged to plant their gardens both earlier and later than the period most suitable for strawberry culture.

Since the last crop year before coming on the program, the project families in Mercer County, in West Virginia, have increased the size of their gardens approximately 25 percent. The average garden during the 1940-41 year contained 0.8 of an acre. There has also been marked improvement in the quality and variety of garden seeds used. The families previously bought only three or four kinds of seeds in small 10-cent packages without regard to their quality or adaptability to the soil and climate. Now they buy cooperatively packages of seed recommended by the West Virginia Extension Service. These seeds are selected according to their adaptability to the soil and climatic conditions prevalent in the State. A package (costing the family \$1.00) contains 26 varieties of seed. All of these families except three raised their own seed plants last year. They are now equipped to combat insects and plant diseases. Each family either owns a duster or has access to one through a cooperative service, and all have received either individual or group instruction as to the kind of dust to use for the different insects. The quantity of food canned in 1940-41 was double the quantity canned the year previous to the beginning of the program.

TRYING NEW WAYS

Handcuffed by a lack of capital, machinery, and training in better farming methods, these families of the various project areas were unable to carry out an extensive cropping system of any kind before they came on the program. Provided with necessary economic assistance and intelligent guidance, they have demonstrated their ability to produce for the market as well as for home use. They are contributing to the war effort through more efficient use of manpower, machinery, equipment, and work stock. Neighboring families often exchange work, and any member of a family whose services are not especially needed in carrying out the farm program is encouraged to find other employment. Machinery, equipment, and work stock are utilized more effectively through exchange by neighbors or cooperative use by groups of families. New and improved crops and live-stock have been introduced to increase cash income and production efficiency.

Kitchen herbs are the one new crop introduced in Orange County, Vt. Eighteen families are now growing a variety of these plants. Potatoes are being grown for commercial purposes for the first time; most of the families are cultivating from 1 to 2 acres. Blue Hubbard squash is being grown to supply the local demand. Several families are selling fancy jellies through a local gift shop that specializes in Vermont-made products. Numerous fruits (such as strawberries, raspberries, grapes, cranberries, and apples) have been introduced or the varieties improved. The small fruits are now producing only enough for home use, but a surplus for sale is expected within the next few years. Families are now growing their own tomato, pepper, cabbage, and herb plants instead of buying them. The addition of sugar rigs to farms where maple groves are available has provided a source of income hitherto unused and has enabled the families to reduce expenditures by substituting the home-produced sweets for commercial ones.

The breed of livestock in Orange County has been improved and inventories have been increased. At the beginning of the program, sheep raising had almost entirely disappeared. New flocks started by project families have proved to be reasonably profitable. The introduction of registered Shorthorn milk cows has stimulated interest throughout the county. Steers and oxen are used as work animals whenever practicable, because many of the farms can be operated more economically with cattle than with horses or mechanical power. The danger of loss is much less with cattle than with horses, the cost of upkeep is less, and the resale value of oxen usually equals or exceeds the original purchase price. As many young stock as possible are being raised for replacement purposes, as well as for sale for additional cash income. Poultry flocks introduced on practically all farms have provided eggs and chickens for home use, and in many cases a surplus for sale. Pigs are being raised for home use for the first time by many of the families. To increase the number of animal units without building up their indebtedness, families usually start with two to four mature animals of registered stock and complete the herd with calves. This gives the families experience in learning how to raise good stock, and leaves time to produce the roughage needed for mature animals. Children have been

encouraged, through participation loans, to take part in the 4-H Club program. In one family a boy 12 years old and his brother 10 years old are starting a purebred heifer each. They intend to sell the animals when mature, repay the loan, and pay the expenses of going to high school. (There are very few high schools here; attendance involves considerable expense which the parents of these boys could not afford.) A few families who have old trucks have added to their income by hauling lumber, pulp wood, and farm products.

During the last 18 months new crops and livestock enterprises have been developed in San Miguel County, N. M., as here indicated:

- (1) Thirty families have planted Number 9 chile which has never been grown in this community before.
 - (2) Twenty-five families have planted sweetclover to be grown as a green manure crop.
 - (3) The majority of families are growing fall barley for feed, to supplement or replace corn.
 - (4) Twelve new orchards, including varieties of fruit new to these farms, have been started. Grapes have been introduced. Many new vegetables have been planted in all of the gardens.
 - (5) Two families have been experimenting with the growing of tobacco.
 - (6) One family bought a registered Hereford bull, and one Belgian stallion has been bought by the group of families.
 - (7) Thirty-eight flocks of chickens - Buff Orpington, Rhode Island Red, and White Rock - have been bought, with an average of 50 chickens per flock.
- Although the development of these enterprises (along with more intensive cultivation of gardens and the keeping of subsistence livestock) has not provided additional income it has reduced cash expenditures and provided the families with better diets and an improved breed of livestock. Production of feed for subsistence livestock has increased considerably. In the spring of 1938 all families (55) purchased feed; in 1939, 46; in 1940, 27; and in the spring of 1941, only 8 families had to buy feed. The 10 additional livestock units per family, provided through the cooperative grazing enterprise, will be a substantial source of cash income.

Classes in woodcraft and weaving are conducted daily at the community center for adults and young people. The purpose is to enable the families to construct usable equipment and home furnishings and, in some cases, to develop sufficient skill to warrant the sale of some of these articles. A promising source of cash income is being developed through the sale of such native foods as chile, blue corn meal, pozole (hominy), sprouted whole-wheat flour (used extensively for pudding and breakfast cereal) and sorghum.

As a result of the National defense program, 10 borrowers in San Miguel County obtained work in nearby copper mines. Each family was given 3 months employment by the Soil Conservation Service during the last year.

Six new crop and livestock enterprises have been developed in Knox County, in Kentucky. They include white potatoes, sweetpotatoes, shuck beans, sorghum, poultry, and purebred cattle. Although white potatoes have been a major cash crop for the last several years, many were lost by spoilage because of poor marketing facilities. The organization of a cooperative marketing association has enabled the families to expand their production of potatoes and so increase their income. Several families are trying for the first time to produce sweetpotatoes to be sold through a sweetpotato cooperative with which they have a contract to dispose of all of their potatoes at the market price prevailing at the time of digging. Several families are increasing their cash income by selling shuck beans. Merchants in nearby mining towns have agreed to buy all surplus beans grown by the project families. Some families received as much as \$50 for beans last year. Fifty additional acres of sorghum were planted last year; two cooperative sorghum mills were bought and cooperative marketing facilities are being organized to sell sorghum sirup. Surplus vegetables and other farm products are being sold by several families. Two project borrowers decided to peddle surplus products during the summer and fall in neighboring mining towns. They made three trips weekly and not only sold their own, but also bought surplus from other families for resale. They made a net profit of more than \$200 each, while helping other farm families to dispose of products. Three families are taking advantage of the increased demand for eggs in the defense program to establish commercial flocks. The families are recognizing the desirability of keeping a few head of cattle of the better type rather than more of a poorer type. One farmer refused \$40 for a small purebred Red Polled bull, whereas he was offered only \$16 for a grade calf of the same age. A considerable saving has come through producing more and better feed for the livestock. There was 75 percent less feed bought last year than in 1938. Ten families tried red clover for the first time; eight more tried either cowpeas or soybeans. One family, whose hillside farm has only 1 acre of land level enough to drive a moving machine over, last year seeded $1\frac{1}{2}$ acres on a 45 percent slope to lespedeza and 1 acre of red clover on a part of the hillside so steep that the clover had to be cut by hand and rolled down the hillside. From the $2\frac{1}{2}$ acres of lespedeza (1 cutting) and clover (3 cuttings) they cut enough hay to feed two cows, a mule, and two small calves through the winter, and in May they still had hay in the barn.

An attempt has been made to diversify crops so that the clients' income will be spread throughout the year, and the "feast and famine" way of living can be avoided. One family of 12 members met their loan payments last year, carried out a substantial canning program, enjoyed home-produced meat, milk, and eggs, and yet had the following cash income from crops and livestock:

| | | |
|-----------|-------|----------------------|
| February | \$80 | from dried beans |
| July | 80 | from potatoes |
| September | 35 | from sorghum |
| October | 160 | from sale of cattle |
| December | 87 | from tobacco |
| Total | \$442 | |
| | | or \$36.83 per month |

Next year, in addition to an increasing income from these sources, poultry will bring in more money for this family.

Approximately 50 percent of the families in Knox County are supplementing their farm income with outside work: in 16 families some member or members have part-time work in mines; 5 have boys working on defense projects, 5 have part-time employment on WPA; 2 families have work in a handle mill; 9 carry small stocks of groceries to be sold to neighbors; 9 boys are in CCC, and 6 girls are receiving NYA aid. This work has not interfered in any way with their subsistence program and, because of the inadequate and poor land, it is essential to supplement their farm income with non-farm work.

The only new livestock enterprise that is being tried in Thurston County, in Washington, is in the form of small bands of sheep. This enterprise is not entirely new to this section; it is new to the county, but heretofore only a few have kept small bands (from 15 to 20 sheep) in connection with dairy and general farming. One family is raising poultry on skim milk and grain, thus cutting feed costs by utilizing a dairy byproduct. Another family is keeping several brood sows by feeding them on skim milk and a little grain. At least 90 percent of the project families in this county raised all the feed they will need for their livestock during the 1941-42 crop year. Carrots and turnips are raised for livestock feed as they yield a large tonnage per acre and can be grown with the families' own labor. Several families are experimenting with blackberries and raspberries, along with strawberries, as cash crops.

Because of limited crop acres, families in Beltrami County, in Minnesota, have been encouraged to grow corn and mangel beets; as a result, 36 project families planted and will harvest a crop of corn during 1941-42. This is a 90 percent increase over the number growing corn last year.

Cutting logs has been a major activity on 36 of the farms in this county during the last 18 months. By using native lumber, a successful building program has been possible. Some families have been able to exchange surplus lumber for finish building material and hardware. Thirty-nine of the borrowers cut a total of 15,545 fence posts during the 1940-41 year, and during the same period thirty-six families cut a total of 266,930 feet of logs, most of which was converted into timber for use on their own farms. One farmer cut and sawed 1,000 feet of shingles to cover his barn. One family, after remodeling their house, constructed a home-made furnace which they are using successfully; two 50-gallon oil drums were used, and old bricks were used in making a jacket around the heating unit. The total cost was \$15.

In Laurens County, in Georgia, there has been a definite increase in the number of crops grown by the clients since they came into the program. Vegetables new to their gardens include carrots, eggplant, spinach, pepper, lettuce, and parsnips; field crops newly grown for marketing include peanuts and peas. Kafir corn and sunflowers have furnished additional chicken feed, while amber cane, millet, and rape have been added to the list of home-grown hog feeds. Increases have been brought about through the selection of a pure variety of seed. Sufficient seed is sold in the fall to enable the farmer to buy new seed in the spring.

Client families in this county have also made considerable progress with livestock. At the beginning of the program less than 15 percent of these families had milk cows. Starting with one cow and one brood sow each, bought with loan funds, no later purchases have been made. It was planned for each family to have at least two milk cows before any cattle were sold. Some clients exchanged two calves for one larger and better heifer. A family having a bull swapped it for a heifer. After $2\frac{1}{2}$ years, 24 of the original 50 had at least 2 cows; 41 of the 50 had a total of 65 milk cows, 21 breed heifers, 26 small heifers, and 21 bulls. By the end of the 1940-41 crop year at least 30 of the families were expected to be able to repay on their account more than the amount loaned for cows from the sale of cattle. In cases where sufficient pasture is available, a third cow will be kept in order that surplus cream may be sold, for the sake of the income. Besides having enough meat, cream, eggs, and chickens, some families already have a surplus for sale.

In Oglethorpe County, Ga., poultry flocks have been increased and improved until now the project families have not only enough for home use, but a surplus to sell. During November and December of 1940 many of the families derived from \$10 to \$27 each from broilers, and as much as \$12 from eggs. Some of the project families are also selling sour cream and butter. In March 1941 these families owned nearly three times as many milk cows as they did in March 1938, and nearly four times as many calves.

In Mercer County, W. Va., most of the project families are raising small flocks of sheep. Money from the sale of wool is used to pay loans. Improved marketing facilities have helped to increase the income from the sale of potatoes.

Cash income from farms in Grayson County, Va., has come chiefly from the sale of poultry, turkeys, pigs, sheep, wool, berries, maple sugar, and herbs. Some families have hired out their teams; others have sold tobacco and timber. Nonfarm income has come primarily from private employment in sawmills, coal mines, and the powder plant at Radford. Some have derived additional income from fishing and trapping, and from NYA, CCC, and WPA.

The cropping system in Reynolds County, Mo., changed considerably between September 1939 and March 1941. There was a noticeable decrease in the acreage of corn planted, with a corresponding increase in "drought insurance" crops such as Atlas Sorgo and Sunrise Kaffir. The plowing under of green manure crops is a new practice that was badly needed. As the project families were unable to raise enough feed for the livestock they already had, a soil-improvement program has been emphasized rather than the expansion of livestock enterprises.

TOWARD A HEALTHIER PEOPLE

To be strong a Nation must be healthy. Poor health and low vitality slow down war effort and even temporary illness can sabotage production efficiency and seriously hinder the cause of victory. The need for medical and dental attention was universal among project families at the time they came into the program. Many were not able to have a doctor at the birth of a child; minor ailments had developed into chronic cases and dental care was almost unheard of. Since then, the improvement effected in these families through improved diet and participation in group medical services is evident, not only in their appearance, but in improved morale and ability to carry on their farm work more efficiently.

Every family in Laurens County, Ga., has been participating in a group medical service since the beginning of the program. They receive medical care at an annual cost of \$16 per family. All families have participated in a dental-service organization during the past year. For this service they pay an average membership fee of \$5 per family, annually. Since the medical services were organized, all families have had a complete physical examination, and 171 persons have had major defects corrected by operations. Tuberculosis suspects have had X-ray examinations every 6 months, and a cure has been effected for the 75 cases treated for hookworm. Dental work done during 1940 included 133 extractions, 203 fillings, 111 cleanings, 25 complete extractions, and the treatment of 37 patients for pyorrhea. These families have realized the importance of immunization and vaccination as a protection against diseases. In 1940 all but two families had typhoid vaccinations.

The 50 project families in Oglethorpe County, Ga. are participating in group medical and dental services. The annual fee for medical care per family is \$15 and for dental services, \$4. Since all families were given a physical examination in the spring of 1939, 86 persons have had defects corrected by major operations and many others have been treated for minor ailments. The dental clinic has served 178 persons as follows: 22 complete extractions, 355 single extractions, 148 fillings, 149 cases of scaling and cleaning, and 25 cases of pyorrhea. The improved condition of persons having total and partial extraction is particularly noticeable.

A medical service has been established for project families in Knox County, Ky. The annual cost of service rendered is \$4 each for the first 2 members in a family, \$2 for each of the next 4 members, and \$1 for each additional member. Some members in at least 90 percent of the project families have defective teeth. One 23-year-old woman who had only blackened stubs, demurred at having a plate at such a young age but later admitted, "I am glad I had them pulled. I have really felt like working my garden this year." Local dentists have been very cooperative; they make plates for members of the project families for \$5 less than their usual charge. Eye defects are prevalent among the families. Eye specialists in neighboring towns have agreed to service project families at a reduced rate; they charge nothing for the examination - only for prescribed glasses.

Cooperation has been received from the Knox County Health Unit. Each school in the county is visited at least once a year to give inoculations against typhoid fever and diphtheria, and vaccinations for smallpox. The county health doctor has been instrumental in getting the services of specialists for goiter cases and crippled children, through his help a reduction of at least 30 percent in rates for cases treated has been secured.

All except two families in Orange County are participating in a Statewide medical and protective health service. (Participation of the families is an accepted part of their program unless it conflicts with religious beliefs.) This service provides all the physicians' care that a family may need, and arrangements have been made in four hospitals serving the district for hospitalization and surgical care. Special rates have been obtained for X-ray pictures. The annual cost of this service ranges from \$16 for a family of two to \$20 for a family of six or more. Although there is no dental program in operation in Orange County during the 1940-41 Crop Year, considerable work was done through grant assistance. After interviewing several dentists, reasonable rates were obtained for extractions and dentures. During the last crop year 17 persons have had fillings, 14 have had partial or total extractions, and 6 sets of dentures and 2 single plates have been made, and 1 plate has been repaired. Eyes were examined for 17 persons and 16 were fitted with glasses.

An educational program covering the following major topics has been carried out in Orange County to acquaint the families with a safer and more healthful way of living:

- (1) A balanced diet based on food requirements.
- (2) Need for proper sanitation.
- (3) Instruction in care of children's teeth.
- (4) Safeguards against accidents in the home.
- (5) Need for wholesome recreation.

A careful survey has been made of the health needs of all project families in Grayson County, Va., and proper medical attention has been provided in accordance with the existing medical facilities. Twenty-two families were participating in the Southwestern Virginia Cooperative Medical program at an average fee of \$26 per family but this program was dissolved because the physicians considered the reimbursement inadequate for the services rendered. Local doctors have approved the organizing of an association on a county basis as soon as sufficient cases are signed up to justify the starting of a new medical program. A Lutheran Church located near the project is sponsoring a medical center outfitted with modern equipment in connection with their Kinslerck Training School. The services of the clinic are available to all noncommercial project families. Bulletins on health and diet have been distributed in the home.

Attempts to establish a medical service in Mercer County, W. Va., have failed. When the first attempt was made 2 years ago, the proposed service was rejected by the County Medical Association. In November 1940

the regional cooperative specialist in charge of medical care again presented plans for a medical program to the County Medical Association. This time the Association approved the plan and agreed that any doctor who wished might participate. A committee of doctors was then appointed to interview any physicians who wished to render service to those taking part in the program. This committee reported that, owing to the isolated location of the project families, only two county doctors could well serve these people, and they did not want to assume the responsibility because of the isolation.

Last fall all children from 2 to 16 years of age were immunized against diphtheria, typhoid fever, and small pox.

Little progress has been made toward developing a medical program in Beltrami County, Minn. The following figures show the need for such a program. In 1940 the 47 families spent \$1,831.47 for medical care, covering only the more acute cases - an average of \$38.95 per family. This was 11 percent of the total amount expended for family living. Until recently the project families have had to pay the same for medical service as independent families. In cases where grants are used in payment for medical care the doctors now render services on the basis of relief rates. Each fall the county nurse conducts an immunization and vaccination program through the school. Twenty-five of the project families who had children used this service; 18 families did not because they did not believe in it. The county nurse has also visited 16 project families during the past 18 months; 15 of these visits were made in order to give prenatal care.

Practically every project family in Thurston County, Wash. was unable to secure medical care for several years before they came into the program. Dental plates for adults and corrective dental work for children has been a major need in this county. There has been also a great need of operations for women who had not had proper care following childbirth. Several men had to have hernia operations if they were to carry on a normal farm program. These needs have been met by use of grants on an individual basis and the State Public Health Department has cooperated in making free treatments possible. Although special effort has been made to organize a group medical service, nothing so far has been accomplished chiefly because of the lack of cooperation in this matter on the part of local doctors.

A medical-care program has been in operation in Reynolds County, Mo., since March 1941, with 44 project families now participating. The annual membership fee is \$23. This includes \$6 for a surgery fund, \$1 for office supplies and secretary, and \$16 for regular medical services. Fifteen of the project women have participated in an educational program in birth-control methods conducted by the Maternal Health Clinic of St. Louis, Mo., in cooperation with a local women doctor. These women have been eager to secure information and the cost to each has been small - \$1 for the doctor and \$0.75 for necessary materials supplied by the clinic.

The following health program has been developed in San Miguel County, N. Mex., through cooperation with the County Health Department and the nurse in charge of the area.

(1) Twenty-six families are participating in the San Miguel County Medical Service Association. They pay an annual fee of \$28 per family, which entitles them to ordinary medical care, emergency surgery, hospitalization, the necessary drugs prescribed by doctors, care for mothers before and during childbirth. Through this service difficulties of 12 women patients have been corrected and many other women have received medical treatment and hospitalization which they otherwise would not have been able to afford.

(2) Maternal and baby clinics are held monthly.

(3) Ninety-seven adults have been given Wasserman tests; eight positive cases were discovered and are being transported in a school bus to the nearest venereal clinic for treatment.

(4) An integrated school health program has been carried on. Physical examinations are given by the county health physician and a follow-up is made in an effort to correct physical defects by a nurse or the FSA medical service. Twelve eye defects among school children have been corrected and 16 tonsilectomies performed.

(5) A series of classes in child care and health for mothers has been completed.

(6) Ninety-five percent of all persons in the community have been immunized against typhoid.

(7) All babies have been immunized against diptheria and small-pox.

The readiness with which these families are adopting improved health practices is very noticeable. There has apparently been a decided decrease in the infant mortality rate. Better diets, improved health practices, and hot school lunches have contributed greatly toward improving the health status of all project children.

SAFEGUARDS FOR BETTER LIVING

To achieve new production goals, the health and physical efficiency of every citizen must be safeguarded against the dangers of contamination and unsanitary conditions. Unsanitary conditions prevalent among project families at the inception of the program presented one of the most difficult problems.

Isolated and ignorant of the dangers of contamination, families in San Miguel County, N. M., had been drinking water from irrigation ditches just as their forefathers had done. Since the beginning of the program, 12 cooperative wells have been dug and adequately protected to provide a safe supply of water for every family in the community. Educational classes in sanitation have been conducted in cooperation with local teachers and the rural school supervisor. In connection with this activity, a group of children examined samples of ditch and river water through a microscope. They were shocked to see the germs they called "little animals." This information, which was carried home by the children, apparently contributed greatly toward the observance of better sanitary practices by their parents. During 1941 the screening of every house in the community was completed, and a sanitary privy for every family was provided.

The introduction of privies, house screens, and pumps for wells has aroused a great deal of interest among project families in Knox County, Ky. In cooperation with the State Health Department, 41 families have each been provided with a sanitary privy, screens for their house and a sanitary pump for the well.

The most effective approach to the sanitation problem in Knox County has been through discussion groups where the supervisor, in an impersonal manner, could bring out the points she wished to stress. Discussion of the reasons for uncleanness and disorderliness, followed by suggestions for remedying, have brought results in many instances. For example, one homemaker had to cook, clean, wash, and sew for a family of 11 persons. In addition, she worked in the field the same hours as her husband. She had no time to take care of her home or family properly. The meals were poorly prepared and the house and children were dirty and disorderly. The advisability of the mother remaining at home was discussed with the family. The family decided that it would be more economical in the long run to have the mother devote all her time to housekeeping and caring for the children. The house is now almost immaculately kept, the children are clean and well behaved, better balanced meals are prepared, and the whole family is in better health and is happier. Recently this mother said, "I make more now for my family by taking care of what we have; I am saving on food and clothing. If I wasn't here the little ones would tear up and ruin more than I could make by working in the field. I used to think a woman that didn't work with their men in the fields was lazy, but I see now where I was wrong."

The introduction of new methods in housecleaning and of new ideas that add to the attractiveness of the house also has made cleanliness more of a pleasure than a task for the families. One homemaker said, "My floors are so much easier to keep clean since you (supervisor) showed me how to make and use that oil finish and wax. Now I can't stand to have them look dirty because they do look so pretty if they are clean."

Much importance has been attached to improving general sanitary conditions in Grayson County, Va. All of the project families now have sanitary toilets whereas, before the program was initiated, only one-fourth had sanitary toilet facilities. Thirty homes have been adequately screened during the past 18 months. One new spring house was built for \$15 and five new boxes were placed around other springs. Water was piped into one home, and the owner is so proud of the convenience that he said, "I wouldn't take a thousand dollars for it."

At the beginning of the program in Oglethorpe County, Ga., less than one-third of the project families had sanitary privies, and only one-tenth had screened windows. Now all have sanitary privies and screened windows.

In Reynolds County, Mo., sanitary privies have been built from native lumber at a cost ranging from \$4 to \$5. During last year, nine families have repaired or built new cisterns with concrete tops to keep out surface water.

Nearly all project families in Thurston County, Wash., have participated in the sanitary grant program. In the past two years, \$2,675 in sanitation grants have been used to improve sanitary facilities. The improvements made included 40 new sanitary privies, 70 screen doors, and 210 windows. In addition, some 3,000 feet of pipe for piping water from springs were furnished together with such items as sandpoints and brick tile. Thirty wells and six springs have been repaired to make them sanitary. Labor used in repairing wells, protecting springs, installing pumps, etc., was supplied by the families. In some cases, two families worked together in digging and repairing their wells.

The following sanitary improvements have been made in Orange County, Vt., during the 1940-41 crop year; 5 new sinks have been provided, 6 water and 6 drainage systems installed, 2 privies repaired, and 55 new window screens made and 5 new door screens. Practically the entire water supply used by these project families comes from springs which have now been enclosed to prevent contamination. Six families that had to carry their water some distance now have it piped into their kitchens. Practically all of the families have had a drainage outlet from their sink, but in most cases it reached only the outside wall of the building, and waste was allowed to drain in the ground. In these cases, the families have dug dry wells and blind ditches a safe distance away from the buildings and have piped them with tile piping.

At the beginning of the program in Laurens County, Ga., only 3 project families had sanitary toilets and 18 had none. More than 40 of the homes were not screened and 45 families had open wells. At present all 50 families have sanitary toilets, screened houses, and covered wells with pumps. Several lot fences have been moved to prevent drainage away from lots to wells. To keep water from standing in yards after rains, low places have been filled in.

The sanitation program, which started over a year ago in Beltrami County, Minn., in cooperation with the NYA and State Health Department, has made considerable progress. Eight new sanitary privies were constructed by NYA workers, and eight sanitary wells that had been started last year were completed. Twenty-four families drilled new wells and seven screened their houses.

From the time the first farm plan was written in Mercer County, W. Va., until the introduction of the environmental sanitation program in the spring of 1940, provisions were included in each plan for building a sanitary toilet and screening the house. In 1940, 26 families were included in the environmental sanitation program, which included the building of a sanitary toilet, screening the house, and enclosing the water supply. Seepage pits and drains were dug to take care of the disposal of waste water.

When it comes to housing - many underprivileged farm families throughout the Nation have been hindered in finding and in fulfilling their capacity because of an impoverished environment. Housing conditions prevalent among project families at the time they came into the program were deplorable. Approximately one-half of all houses occupied by these families were too small to accommodate them comfortably. Families of five and six members were often forced to sleep in the same room regardless of age or sex. Houses fairly adequate in size were usually old, dilapidated, and poorly ventilated. One-half of the dwellings were unscreened and only one-fourth were rated as having screens in good condition. In some of the counties as few as 10 percent of the houses occupied by project families were screened. Adequate closet and storage space was nonexistent. To provide better housing and farm facilities, it has been necessary to carry out an extensive building and home-improvement program. The use of family labor and native materials has been emphasized and much has been accomplished at a relatively small cost.

In Orange County, Vt., necessary home improvements have been planned over a period of several years, according to the labor and expense involved, with such improvements as roofing, sanitation, insulation, and cellar repairs being given first consideration. During the 1940-41 crop year, approximately 1,742 days of labor were used in home construction and improvements. Only 119 days of this work was hired labor, and the total cost was \$480.19. Many minor repairs consuming only parts of days were not reported. The major portion of the hired labor was used in the construction of the new silos (of which 2 were built with lumber taken from

the home farms), and the repair of 8 cow stables. Some of the cow stables were in such bad condition they had to be almost entirely rebuilt. One new storage shed, 2 hen houses, 7 milk houses, 1 barn have been rebuilt; 9 hen houses remodelled; 3 new roofs put on barns; 1 milk house repaired; and 28 new stanchions installed to care for the increase in livestock production.

In addition, the following improvements and repairs were made: 1 cellar built and 5 others repaired, 32 rooms papered, 25 rooms painted, 5 floors painted, 8 plastered walls patched, 8 rooms remodelled, 9 windows repaired, 2 porch steps repaired, 5 new sinks installed, 6 homes equipped with water and drainage system, 6 privies repaired, 50 new window screens made, 5 new screen doors, 18 storage shelves and 2 cupboards built, 1 complete kitchen unit constructed, 6 closets made, 3 ceilings put in homes, 1 new roof put on house, 1 installation of electricity, 2 new chimneys built, 5 new rooms added, and 13 new windows built.

One homemaker in this county carried out the following improvements, doing most of the work herself. She sawed out and built 7 screen windows and 2 doors, improved the sanitation facilities, changed the location of the kitchen and papered and painted it, took out a partition in the pantry and made a small bedroom of it, patched the plaster in one room, moved the kitchen sink to a more suitable location, and planned and helped to build a broad shelf and closed-in cupboards.

Although the housing conditions in Knox County, Ky., were very poor at the beginning of the F.S.A. program there, most families thought they could not afford to buy the lumber needed for improvements. As there was a demand for cross ties in the area, a small sawmill was set up for cutting ties and later two additional sawmills were set up. As a result, families have been able to use native timber in the construction of 9 new houses, and in repairing at least half of the houses in the project area. The major part of the building and repair program was concentrated on the establishment of adequate storage space and poultry houses. Since March 1, 1940, 65 new storage houses have been built. These houses were built with native stone at an average cost of \$23 each. The construction of the storage house has helped to solve the problem of closet space as canned food had heretofore been stored in clothes closets. Along with the storage construction, 36 poultry houses have been completed and 43 others are under construction. Three of these houses were constructed to house commercial flocks, while the others were for subsistence flocks of from 35 to 40 hens. The average cost of these houses was \$30, excluding the labor which, in all cases, was furnished by borrowers. Three new barns have been built and 6 others extensively repaired. In addition, more than half of the farmers have made minor repairs in outbuildings.

Families have been encouraged to do their own building or exchange work with better skilled workers on the project. One family was made a supplementary loan of \$150 with which to repair the barn and build a poultry house; by using native materials and doing their own work, this family built a new barn and poultry house that was recently appraised at \$800.

Landlords in Laurens County, Ga., have been very cooperative in improving housing conditions. Eighteen houses have been repaired or remodeled by building more rooms. Four new houses have been built and four more are being repaired. In all cases, the landlord either agreed to pay the total expense or an arrangement was worked out whereby he furnished the material and the family furnished the labor. Improvements agreed upon are included in a written land lease, and in several instances the landlord has furnished materials not mentioned at the time the lease was written.

A better housing program which provides adequate living space, sanitation, and home beautification, is gradually being developed in San Miguel County, N. M. This is being done with a minimum outlay of cash by utilizing personal labor and native materials such as adobe for walls, vigas (rough timber) for rafters, light-colored-clay whitewash, flagstone walks, and home-made furnishings. One family built a five-room house consisting of two bedrooms, living room, dining room, kitchen, and necessary space for storage of food and clothing. This was possible because the only cash expense involved, aside from paint for the woodwork and screening, was second-hand lumber obtained at a reduced price, windows, and roofing. Few tools are needed in building as walls are usually constructed of adobe which, in most cases, is plastered by hand. The families own the tools needed for rough work and a complete set of carpenter tools was bought by the group. These tools were placed in the community shop where any member may take his material and construct or finish his house furnishings, such as trimming doors and windows, and building screen doors, yard gates, shelving for cabinets, chairs, and tables. All building and repair work has been done by the families; in a few cases neighbors have exchanged work.

Since the inception of the program, all project families have had instruction in this kind of work. This includes use of all finishing tools and instruction in methods, from the vocational instructor at the community center. They received instruction in the laying of rock for curbing in the community wells, were shown how the rock should be keyed to prevent caving, and were taught to build a substantial new kind of windlass which they used in digging their wells. Other achievements during the past 18 months are as follows: 27 storerooms and 2 cellars for storing food have been built, 12 clothes closets constructed, 14 houses plastered, 3 new houses built, 15 yards improved with flagstone walks and flower gardens; 18 homemakers have improved and repaired furniture (bedsteads, chairs, tables, kitchen cabinets, curtains, and rugs); 12 have built new poultry yards; 15 have repaired stables, corrals, hog pens, fixed storage space, and made other general farmstead improvements.

In Oglethorpe County, Ga., during the 1940-41 crop year, a total of approximately \$150 was allocated for home furnishings and household operations. This money, which was prorated among the families, was used by 16 to buy kitchen equipment, by 26 to buy sheets and pillowcases, by 11 to buy washtubs and boards. Four have bought new stoves and three have bought bedsteads and springs. Twenty-three families have made brooders;

three have built chairs, benches, and tables; one bought a bed. The clean-bed campaign, started last fall, has considerably increased the number of sheets and pillowcases made by the families. Since then, 125 comforters and quilts have been made. Major improvements in dwellings consist of new sills in foundations, new floors, new doors, windows, roofs, and new kitchens.

In Thurston County, Wash., practical adjustments, replacements, or improvements have been made (in cases where houses were definitely below the standard of health and decency) through addition of more space or by renovation. The seven new houses that have been built cost on an average of \$300 to \$400, excluding labor furnished by the family. The families do practically all their own building and repair work. Usually they are able to exchange work with some neighbor who does masonry or other skilled work. As a rule, lumber is bought from a small sawmill located in second-growth areas where large logging companies have taken out the big timber. This first-grade rough lumber can be bought for one-half to one-third the price of finished lumber at a yard in town. Two families have a cooperative mill which they plan to use in cutting lumber from their places for their farm buildings. In addition to the homes built, 13 have been greatly improved. In all cases, some assistance has been extended through the use of grants. Five barns have been built and 20 others repaired. More adequate storage space is being provided; 17 families have built or repaired feed storage facilities since coming into the program.

Four houses and four storage cellars have been built in Reynolds County, Mo., during the past year. This work was done by the families and their neighbors.

Latest information on the subject, from the Virginia Experiment Station and the Farm Security Administration, has been used in improving and repairing buildings in Grayson County. The labor in most of the building and repair work has been supplied by the families with the help of other borrowers. One 24 by 30 foot dwelling was constructed for \$395; another family built a home 24 by 28 feet for \$490. Rooms have been added to 2 houses and 4 others have been covered - 4 with metal roofs, 7 with rubber, and 1 with wood shingles. In 12 homes general improvements were made such as changing windows to get better lighting and to improve ventilation; papering walls; improving walkways, steps, foundations; building new porches; repairing old ones; fencing in yards; and planting trees, shrubbery, and flowers. Twenty-four families have built storage houses, as a rule 10 by 12 feet in size. All other families have adequate storage space, with the exception of a few minor repairs that are in the process of being made. Two new barns have been constructed - one 20 by 24 feet for \$85; the other 15 by 10 feet for only \$20.

Typical farmstead improvements made in Mercer County, W. Va., include: underpinning houses with poles or rocks from the farm; replacing windowpanes and making of new window frames; repairing and reroofing houses; repairing chimney flues; repairing floors, porches, and steps; laying flagstone walks; fencing yards; sowing grass, and planting flowers.

Fourteen families in Mercer County, W. Va., have completed a cellar of some kind since coming into the program. The cellars are usually the cave type, dug into the side of the hill and walled up with logs, rocks, or cement. Eighteen families have built poultry houses, varying from crudely constructed pole affairs to a modified Cornell type, built of rough lumber.

LEARNING TO DO SIMPLE THINGS

Effectiveness of agricultural manpower can be increased by correcting educational deficiencies prevalent among underprivileged farm families. Many disadvantaged families are unable to perform simple farm tasks that are taken for granted by better educated and equipped farmers. Training in simple farm tasks has been a forceful factor in the rehabilitation of noncommercial families. The unused capacity of these families has been tapped and many problems have been solved through an educational approach. At the beginning of the program, supervisors were quick to discover the necessity of educational activities in realizing rehabilitation goals and they have utilized a variety of ways to disseminate knowledge among the project families. When the program first started, the majority of families required explicit instructions in carrying out the simplest practices in good farm and home management. One supervisor recently emphasized this phase of the program when she said, "In dealing with families in this area, it has been necessary for us to be teachers first, then supervisors."

Supervisors in Orange County, Vt., found it necessary to use direct teaching methods in supervising the development and execution of individual farm and home plans. At the beginning of their work with a family they have spent considerable time in explaining the account book, because none of the families kept records before. Instruction was provided in planning and carrying out a garden program to include the proper methods of planting, cultivating, and even harvesting vegetables. Canning demonstrations and instructions in the use of pressure cookers for canning and cooking were given individually and in groups.

The carrying out of a rounded subsistence program involved teaching proper care of animals, and methods of curing and caring for home-produced meats; giving instructions in making butter and cheese, the preservation of eggs for home use, proper methods of fruit and vegetable storage, sewing and clothing renovation from elementary work to tailored garments. Families have been shown how to paper rooms, paint woodwork and furniture, patch plaster, build shelves, cupboards, chimneys and frames for screens, remodel rooms and install new windows and wallboard. They have been shown efficient cleaning methods and taught to make soap from surplus fat. Methods of repairing and making over farm machinery have been demonstrated. Plans and methods of construction of silos, hen houses, barns, range shelters, corn cribs, ice and milk houses, and stable repairs have been provided. Directions and instructions have been furnished on the installation of sanitary drainage and water installation. Soil conservation practices have been recommended with instructions as to methods to be employed. Training in feeding methods, rotation of crops, and improved breeding programs have been carried out.

Instructions have been given in some nonessentials that add greatly to the satisfaction of the families. Families were taught to make quilts, curtains, bedding, and other household linens. Instructions have been provided in waffle weaving, typing, dyeing, simple embroidery, and weaving and loom assembly. Some time has been spent in group work on arrangement of looms, color schemes, etc. Assistance has been given in upholstery and furniture repair.

The scope of training for project families in the 9 other counties included in the experiment is similar to that found in Orange County, Vt.

One of the most popular and effective means of disseminating knowledge and of developing a cooperative spirit among these families has been through the organization of discussion groups.

In Reynolds County, Mo., groups of 6 to 10 women meet regularly at convenient central points. The first meetings were held in the more progressive homes where there was something to show. After this each member invited the group to her home. Weekly meetings were held until outside work became heavier, and then they were held only twice a month. The meetings are informal and no refreshments are served. The discussions relate to home management, such as better food practices which include meal planning in line with foods available in the home, food production and preservation, school lunches, and feeding the child. Other subjects considered were health, sanitation, safe water supply, and better arrangement of kitchens. These discussion groups have encouraged the families to serve the foods that are the prerequisites for good health and have guided them in better planning. The meetings stimulated pride in their homes and accelerated their accomplishments.

Community-wide meetings are held in Reynolds County each month for all members of the families. These meetings usually open with some form of entertainment, such as the playing of musical instruments and singing. A 15-minute educational talk is then given by a supervisor, or someone from a visiting agency, or a well-known community leader. The lecture is followed by a 15-minute discussion in which all the families are encouraged to participate, then games are played. Similar discussion groups are conducted in the 9 other counties in the experiment, and they have been of great value in promoting cooperation among the families and in stimulating a desire for a higher level of living. Additional opportunities for vocational training have been made available through cooperation with other agencies particularly the NYA, CCC, and 4-H Clubs.

In San Miguel County, the New Mexico Extension Service has cooperated in organizing two 4-H Clubs in the community, and with the assistance of local leaders the 4-H Clubs have completed their first year's projects in woodwork, clothing, and food in 1941. The boys are now working on a community garden project to raise vegetables to be canned by the girls in their canning project. These canned vegetables will be used for hot lunches for the school children during the winter.

Canning, cooking, and meal demonstrations have been conducted from time to time.

In Thurston County, Wash., arrangements were made in 1941 with the State head of Vocational Home Economics whereby children in project homes who are taking home economics at school may be given projects that can be completed at home, as this will aid in developing better living standards in the homes.

In nearly all of the counties at least a few boys have received useful training in mechanics, and woodwork, provided through the NYA and CCC. Excellent training in homemaking, including cooking, sewing, rug making, and knitting has been made available through the NYA to a number of project girls. Money earned from these activities has reduced some of the grants, and the value of the training is evidenced by improvements in the homes.

OTHERS HELP

Cooperation and teamwork with other governmental and local organizations have done much toward speeding up the rehabilitation and production efficiency of project families. Progress in this phase of work was greater during the last crop year (1940-41) than at any other time because a better understanding now exists as to the policies, functions, and facilities of each agency and the field in which it is best equipped to serve the families effectively. The way in which this understanding has been reached, and the agencies that have been extending a helping hand, have been much the same in all 10 counties. For example, in San Miguel County, N. M., (through personal visits and the County Inter-Agency Council) with the personnel of practically all Federal agencies that operate in this area.

These agencies and local community leaders include: Forest Service, Extension Service, Agricultural Adjustment Administration, State Health Service, National Youth Administration, Works Project Administration, State Department of Vocational Instruction, State Land Office, State engineers, district sanitarian, county superintendent, rural school supervisor, local school teachers, and boy scouts.

In San Miguel County, N. M., the interest of Archbishop of the Diocese of Santa Fe, the local Catholic priest, and the Catechist sisters were enlisted. At present, the Recreational Department of the WPA has assigned an instructor to the community house at El Pueblo to conduct informal classes in several types of shop work, weaving, and leather tanning. During the summer of 1940 this instructor supervised the garden clubs.

The Bureau of Agricultural Economics and the Soil Conservation Service in San Miguel County cooperated in working out plans for a water-facilities program in the community. A program of development for the project area practically completed in 1941 was carried out in cooperation with the Soil Conservation Service.

Educational facilities and recreational programs which provided for educational movies and other activities have been carried out in cooperation with the County Rural School Supervisor. Visits were arranged through the aid of the Rural School Supervisor whereby children from El Pueblo (project area) visited the training school in Las Vegas, and in turn, children from the training school visited the school in El Pueblo. The groups observed conditions in the two schools and exchanged conversation.

A WPA project was set up for the construction of sanitary units in the area, WPA furnishing all labor while the families, assisted by FSA, furnished the material. The Home Management Supervisor has worked closely with the county health nurse in activities relating to mother study clubs, clinics, and disease prevention. The county agent has been particularly helpful in 4-H club work. A pruning demonstration arranged by the county agent was conducted by a specialist from the State college and a mattress and comfort program was successfully carried out in cooperation with the AAA and the Extension Service.

A common understanding of problems of the area (embracing an entire village) has been worked out with the Soil Conservation Service, Bureau of Agricultural Economics, State Health Service, the county school system, and the Recreational Division of Works Progress Administration. This understanding is based upon the precept that while the chief problem of the area may be primarily agricultural, it cannot be solved through agricultural measures alone but must be attacked from all angles by improving the social, educational, and health phases of the area as well as the economic phase.

CASES IN REHABILITATION

Concrete evidence of changes made by those participating in the noncommercial type of FSA rehabilitation programs is presented through actual case histories of 10 families (who have been given fictitious names) from 10 projects in operation throughout the country. Each of these cases was confronted with the same basic problems before they began taking part in the FSA experiment, and each has been dealt with in the same basic manner, with allowances for different conditions in the widely separated areas. This collection of case histories gives definite evidence as to what families in these situations can do for themselves under sympathetic conditions, and the contribution they can make to the Nation's production efforts if provided with proper guidance and intelligent direction.

Orange County, Vermont

The Zero family had experienced nothing but deprivation and insecurity in their struggle for existence. Mr. Zero, who was 41 years old in 1941, became an orphan when a small boy. As his relatives were poor and unable to care for him adequately, he started to work when very young. His school attendance was irregular and, although he managed to finish five grades, it is now difficult for him to write. His wife, who was 31 years old in 1941, finished eight grades. In the 16 years they have been married, they have had six children. Two died when infants; of the other four, the two boys are 14 and 11 years old, and the girls are 9 and 4 years old. They have moved frequently in search of work; their longest residence was in a small town in New Hampshire where Mr. Zero worked as a farm laborer for 5 years and in a woolen mill an additional 3 years. After losing the mill job in 1937, they came to Vershire, Vt., (project area) where Mr. Zero would work on a pulp job; the family lived on a farm for 11 months but did no farming. Unable to pay rent, they moved to a deserted one-room schoolhouse and were living there at the time they applied to be included in the FSA experimental program. In the meantime, the pulp job had been completed and Mr. Zero had no prospects of future employment. The entire family had been through the previous winter with insufficient clothing. The children, who had to walk approximately 2 miles to school, were without adequate shoes; although Mr. Zero had to work in the open during the winter, he had no heavy clothing. Mrs. Zero remained at home because she had nothing fit to wear in public. The entire family was undernourished and badly in need of medical and dental care.

Thoroughly discouraged at the time he asked for assistance, Mr. Zero said, "I don't know what I want or need - all I know is that I want to get out of the fix I'm in." After he was told it would be possible to work out some plan whereby the family could obtain a better living and that he could be reasonably sure of getting assistance from the FSA, Mr. Zero was able to buy a small place priced at \$350 without making a down payment. The person from whom he bought agreed to take a mortgage on the property for \$350, with principal payments of \$100 per year at 5 percent interest. This property, consisting of 22 acres of land (2 acres tillable and the rest in woodland), a small house, and a barn, was located near the schoolhouse in which the family was living. As soon

as the deal was consummated, the family moved all of their belongings in a wheelbarrow to their new home and even though it was late in the season (July) they immediately planted a small garden. While these changes were being made, definite planning was started and temporary grant assistance was recommended for a period of one month during the development of the plans.

The first home visit made by the supervisors was spent in a general discussion of what FSA would be able to do and what was expected of the family. The value of planning was emphasized and the family was shown how to set up an account book. An inventory of home furnishings was made and used as a basis for estimating the needs of the family for that year. Forms for farm and home plans were left with the family to study and they were asked to make a note of any questions that might arise before the second visit.

During the next visit, work was started on the plans and continued on later visits. These plans were worked out with Mr. and Mrs. Zero and each detail in the program was thoroughly discussed before any decision was reached. This consumed considerable time, but the procedure enabled the family to get a clear picture of the meaning of the plans.

In the process of planning, it became apparent that the development of a subsistence program would not be possible with the available resources; possibilities of obtaining additional land were, therefore, considered. A 640-acre tract was located nearby and a loan of \$650 was made to the family with which to buy it. Approximately 50 acres of this land was tillable and the remainder was heavily wooded. Development of a subsistence program for the first year was limited to vegetable production, for it was late in the season, but garden plans for the following year were included as a part of the year's planning.

Adequate use of home-produced dairy products was planned. At first the family used them to excess because they had been without them so long but after a few weeks the quantity consumed was normal for a family of their size. They managed to get a small pig which provided sufficient pork to last through the latter months of 1939, and a brood sow was included in the plan to help provide a year-round supply. No beef was available for butchering the first years, but Mr. Zero had enough work to pay for a yearling that was butchered for home use. The consumption of eggs was increased from 2 to 3 dozen a week.

As the garden was not a success the first year, there was an inadequate supply of canned and stored foods. To help offset the food shortage and keep down cash expenditures, the family was recommended to receive "Surplus Commodities." There was no equipped sugar place on the farm, but it was planned that the family would tap a few trees around the buildings and make enough sirup for their own use.

The program was carefully carried out. Moreover, Mrs. Zero made a surplus supply of butter which was salted down to be used when milk production would be inadequate for the family's needs. The first tub of

butter salted down spoiled but after being shown how to pack it properly, Mrs. Zero has successfully carried out the practice. She was also taught how to cure pork and can surplus meat.

During the 1940 growing season an excellent garden was planted and about 400 strawberry plants and 50 raspberry bushes were set out. The yields from the garden were good and Mrs. Zero's canning record was correspondingly high. A large supply of root vegetables and sufficient potatoes for their own use were stored. The family's meat production was increased enough to provide practically all the lard and pork needed for a year-round supply. The use of eggs was again stepped up and the family began making cheese for their own use. A calf is being kept to provide beef during the winter of 1941. The poultry flock will be culled in the fall and the surplus chickens canned. During the spring of 1940 the family set out grapevines, a cranberry bush, and a few young apple trees. They have had a harvest from their strawberry bed, made their own sirup as planned, planted new vegetables, and are now trying for a winter supply of onions. They raised their own tomato, pepper, and cabbage plants.

Before coming into the program Mrs. Zero had a reputation of being a very poor housekeeper. When the first few visits to the house were made by the supervisors, the house was dirty and untidy. However, Mrs. Zero appeared eager to add any touches that would improve the cheerfulness of the home and to appreciate suggestions as to methods of cleaning and caring for the house. Suggestions were immediately put into practice. Because the family had so little cash only one room was papered and painted; it had been very dark and poorly lighted. Considerable patching of plaster was necessary and this was done over a period of time. A new roof was put on the house before any inside work was done. Doors and windows were tightened and window screens were made, to get sanitary ventilation. The walls of the bedroom were covered with wallboard and lath. The drainage system from the sink ended outside the kitchen window, forming a pool of stagnant water which attracted flies and insects; to correct this Mr. Zero dug a drainage ditch away from the buildings. Grant assistance was used to buy necessary piping materials. These improvements have been done over a 2-year period. In April 1941 the family took off the little plaster which remained on the ceiling of their living room and put on wallboard. The dining-room ceiling, which was about the color of the kitchen stove, was scraped preparatory to applying a coat of murexco. All the work was done by the family. The kitchen was an unsatisfactory working unit with no place to keep dishes and foodstuff except on open shelves. The family enclosed these shelves in a cabinet unit and added a broad working shelf.

Although the family owned a sewing machine, Mrs. Zero had never had any experience or instruction in sewing. The machine had been used only for mending and even this was poorly done. She had been unable to make the best use of old clothing given to the family. Garments for the children had been cut down or turned up as needed without regard to fit. She was taught how to take these garments apart and remake them according to correct measurements. As her ability in plain sewing improved, she became more ambitious. She now makes pants and jackets for the boys and undergarments and dresses for herself and the girls. She has also learned to knit socks and mittens for the children. She has used bleached grain

bags to make many furnishings for the house; she has built up her inventory of sheets and pillowcases, made luncheon cloths, towels, stand covers, curtains, has tied quilts, and has covered sofa pillows by using small pieces of print in the form of patchwork. Embroidery and crocheted edges were used to add to the attractiveness of many of these articles. She has also learned to do waffle weaving and has used inexpensive carpet warp to make several sets of mats.

The children, too, have been interested in making things for the home. The 12-year-old boy has made orange-crate chairs for the children, racks with attached hooks on which to hang clothes, wastebaskets covered with scraps from a wallpaper book, holders for memorandum pads and pencils, and several pieces of doll furniture for his youngest sister. The eldest girl, not to be outdone by her brother, has painted a number of old peanut butter jars with red and green paint to be used for vases. The family had no cash to spend for Christmas gifts, but they remembered numerous relatives with home-made gifts like these. The supervisor was given a centerpiece made by the children from a birch log; they had bored a hole for a candle and trimmed the whole with evergreen and red berries. Mr. Zero put up clothing bars to save space and help take care of the clothing. He built a medicine chest from an old battery radio cabinet; with the aid of the eldest boy he built a linen closet in unused space at the top of the stairs; and made a drinking fountain for the chickens from the bowl of an old separator.

Plans to improve the health of this family were made immediately after they came into the program. As much of their trouble seemed to have been caused by bad teeth, Mr. and Mrs. Zero were sent to a dentist for an examination. Total extractions were recommended for both of them and special rates were obtained. It took several months to remove Mrs. Zero's teeth because they were in such bad condition that only a few could be pulled at a time. Her health has steadily improved since she has had her dentures. Previously she had had several miscarriages and at the time the youngest child was born, she was confined to a hospital for 3 months. Since the family came into the program, she has gained 30 pounds, feels well, and is able to do a hard-day's work. Mr. Zero waited until all the farm work was finished and harvesting was over before he had his teeth extracted and, although he has had his dentures for only a short time, his stomach condition has greatly improved. Special rates were obtained for extraction and preventive work for the children in dental clinics held by the school. Arrangements were made to have the tonsils and adenoids of the youngest boy removed at a hospital clinic during the summer of 1941. The family has received prompt medical attention through participating in a Group Medical Care Program.

Recommendations were made in the original plan for the family to buy two registered milking shorthorn cows to supply milk for their own needs and to produce high-grade livestock. This would enable the family to build a producing herd over a period of years and provide animals that would bring a reasonably good price. This particular breed was recommended on the basis that bulls that were not suitable for breeding purposes could be raised for beef and cows no longer profitable as

producers would bring a higher price for beef than old animals of strictly dairy breeds. To increase the size of the producing herd more rapidly, it seemed advisable to add five or six heifer calves of this same breed. By starting with two cows rather than a large herd, Mr. Zero would have time to construct a milkhouse and make repairs on the barn necessary to pass milk inspection before the young stock came into production. By using lumber cut from his farm and doing the work himself, he could avoid increasing his loan to provide these essentials. Mr. Zero had ample hay for these animals during 1941 and planted 2 acres of corn, 1 acre of wheat, and 2 acres of oats. Growing this grain will practically eliminate the necessity for buying any commercial feed. For cash crops for the crop year 1941-42, he planted approximately one acre of potatoes as well as small strips of beans, squash, and turnips.

The purchase of oxen was planned because Mr. Zero had had considerable experience with them. In addition, the original cost of a pair of oxen would be considerably less and the resale value would probably equal the purchase price. Further plans were made to raise steers to replace the original oxen - the money received from the sale of the older oxen to apply on their loan. For this reason, repayment schedules were postponed to the third, fourth, and fifth years to give the family a chance to sufficiently increase their income to meet the repayments.

During the winter of 1940 Mr. Zero sold 30,000 feet of lumber from his farm. He cut most of this and all of it was skidded from the woods with his oxen. The proceeds were applied on current expenses, payments due on the real estate, and taxes. He also cut approximately 2,000 feet which were used in building a storage shed for grain and in other minor repairs.

This family is proud of its achievements. As its circumstances have improved, it has become more interested in affairs outside the home. The children began to attend Sunday School regularly and are now members of the Junior Choir. As their interest in church activities increased, Mrs. Zero began attending meetings of the Ladies Aid. At first she was shy and had little to say, but she gradually gained confidence in herself and now she takes active part in affairs of this and other groups. Mr. and Mrs. Zero took part in organizing a group-purchasing association and have shown much interest in the development of the weaving center and the loom project. In some instances, their enthusiasm for these projects has influenced others to participate. Mr. Zero is a member of the Orange County Farmer's Cooperative Association, Inc., and though he has no means of transportation, he makes an effort to attend every meeting. Mr. and Mrs. Zero have to walk at least a mile and a half to attend these activities and frequently have to take the children.

This family is no longer discouraged. They are looking ahead to a definite program of rehabilitation which they feel certain will eventually make them self-supporting. They have greatly improved their efficiency in farm and home practices and their attitude toward supervision has been excellent. Advice and suggestions have been carefully followed. Recently Mr. Zero said to the supervisors, "I'm getting along fine now, but I still need someone to help me with my thinking."

Grayson County, Virginia

Mr. and Mrs. Doe are probably among the hardest working people in Grayson County. Mrs. Doe, now 29 years old, was married when she was only 11; Mr. Doe, age 36, was 18 years old at the time of their marriage. They have five children ranging from 1 to 15 years of age. Mr. and Mrs. Doe have a good family background of early American origin, and their families have always earned a living by tilling the soil.

For a few years after they married, the Does rented a farm in the part of the county in which they were reared. With \$50 earned from day labor they later bought 2 acres of land and after a time they were able to buy an additional 5 acres in the same manner. Being badly in need of money for necessities in 1932, the land was sold and they again became tenants. In 1939 their only cow was sold to get enough money to make the down payment on their present farm.

At the time this family came into the experimental program, they were living in two very poorly-kept rooms which were heated with a stove made from an oil barrel. A third room had been started but never completed. The house leaked throughout. Some of the windows were boarded up and panes were missing from others. There were no screens and the porch floor had almost rotted away. Since they entered the program, Mr. Doe has cut shingles to put a new roof on one side of the house and he has repaired the other; the extra room has been completed, screens made, window panes replaced, a new porch floor laid, and new porch posts put up. Since the house repairs have been made, the oil barrel which still serves as a stove heats the room very well.

The year before they entered the program, Mrs. Doe canned 108 quarts of food - mostly fruits, pickles, and sweets. In 1940 she canned 432 quarts, consisting mostly of vegetables. Their supply of stored food was increased considerably. The production of dried beans was increased from none in 1939 to 180 pounds in 1940; sorghum from none in 1939 to 10 gallons in 1940; white potatoes from 9 bushels in 1939 to 20 bushels in 1940. In 1939 they had no cows or chickens; now they have 2 cows and 50 chickens. In 1939 food kept for winter use was buried in a hole under the house; in 1940 a combination storage and meat house was built of stone and concrete. As this was the family's first experience in this type of work, the building is rather crude. The stones in the storage section are very unevenly laid, but the meat house which was placed over this is more neatly constructed. This family previously had not realized the necessity or convenience of these improvements and had always associated them with people of much better financial standing.

A sanitary toilet and a spring house were built during 1941. Mrs. Doe built the spring house. She does almost any work about the farm ordinarily done by a man. Whenever possible Mr. Doe obtains work at a nearby lumber camp, leaving his wife and children to run the farm. For additional income, Mrs. Doe does a neighbor's laundry each week and takes part in a mattress-and-comfort project. She is a much better manager than her husband and helps to make the important decisions for the family. She has shown particular skill in keeping the family record book.

During the crop year 1940-41 several additional improvements were made by this family. Buildings on the farm have been kept in good condition and a new hog pen has been built for the hogs that previously slept on the front porch. Approximately 125 rods of wire fencing have been erected and a large amount of brush and rocks removed, 3 acres of land were cleared and put into cultivation, 5 tons of lime spread, and complete fertilizer used on all crops. This practice of using a well-balanced fertilizer had never been followed before and the crop yields were much lower than they are now.

The outstanding progress made by this family has greatly strengthened their morale, and they are more determined than ever to secure for themselves a more satisfactory way of living.

Laurens County, Georgia

The Jones family is typical of families found in the rural areas of Laurens County at the time the experimental program started in 1939. This family of 13 members was living in a 4-room house with wood shutters. Sam was 56 years old and his wife was 45; they had eight children and the oldest daughter and her three children had been living with Sam ever since her husband was committed to the State Asylum over a year before.

Sam had never gone to school a day in his life, but his wife had finished the fifth grade. None of the children (ages 25, 18, 16, 14, 12, 10, 8, and 6 years) had gone beyond the third grade. At the time they came into the FSA program the children were not attending school because they did not have clothes or shoes that would do.

During the 34 years of their married life this couple had moved 19 times. Although when they first married they cash rented and owned a "plug" mule, they were unable to "clear" any money. At the end of the third year the mule died and they were forced to start sharecropping. They never had a fall garden or cow. As the food crops were neglected, it always took all they made including corn, feed crops, and most of their hogs to pay their "runbill." The last year they sharecropped they raised 35 hogs but all except one of these had to go to their landlord to apply on their runbill. Their total assets at the time they came into the program consisted of 2 brood sows and 15 hens. Their morale was very low, and the entire family was undernourished and in need of medical care.

Complete physical examinations given to all members of the family in April 1939 revealed that 5 of the 13 members suffered severely from malnutrition and had developed pellagra and 8 had hookworms. Eight of the children were badly in need of dental care, seven needed eyeglasses, four needed tonsilectomies, three needed circumcisions, and one of the boys needed to have a pilonidal cyst removed. Mrs. Jones needed to have all her teeth removed and some serious internal trouble corrected; Mr. Jones needed a hemorrhoidectomy.

Since April 1939 all of these defects have received attention except buying false teeth for Mrs. Jones and glasses for the seven

children. These corrections, along with improved diets, have contributed much toward the rehabilitation of the family. The extent to which progress has been made in improving their diet is indicated in the following table which shows the increase in home-produced food since the family came into the program during the early part of 1939.

Table 1. Quantity of food produced during the years 1938, 1939, and 1940.

| Item | 1938 | 1939 | 1940 |
|---|------|------|------|
| Hens (number) | 15 | 50 | 40 |
| Canned foods (quarts) | 30 | 588 | 768 |
| Vegetables planted in fall garden (kinds) | 0 | 5 | 9 |
| Dry peas and butterbeans stored (bushels) | 0 | 4 | 9 |
| Sirup (gallons) | 20 | 147 | 0 * |
| Sweet potatoes (bushels) | 0 | 50 | 20 |
| Hogs killed (number) | 4 | 9 | 8 |
| Cows on hand (number) | 0 | 1 | 2 |
| Heifers on hand (number) | 0 | 1 | 2 |
| Calves on hand (number) | 0 | 0 | 1 |

* The severe winter in 1939 killed most seed cane, therefore, 1940 production was saved for seed.

When this family first came into the program it was apparent that they wasted a great deal of valuable time. This was overcome by discussing and by pointing out what successful farmers in their neighborhood were doing during the winter months and on rainy days. Observation of these families helped to stimulate the Joneses to make better use of their time and to do better planning. There was a surplus of labor for a two-horse farm so the oldest boy was encouraged to go to a CCC camp. This was a great help to the family; they placed the money received in a joint bank account to be used for buying food, clothing, bed linens, canning supplies, etc., as such articles were needed instead of spending all the money when it was received.

The children now have clothes for school and are attending their classes regularly. The married daughter and her three children are no longer there; her husband returned from the State Asylum in December 1939 and since then has been working on WPA projects. This daughter recently said, "There sho is a difference in the food mamma and papa has now. I ain't gonna tell no story about it; I do come to see them oftener now just to git some of the good food mamma has."

This family has definitely moved toward rehabilitation. It is significant that improvement in health and managerial ability essential to their ultimate rehabilitation is being effected along with material improvement.

Oglethorpe County, Georgia

Mr. and Mrs. White were reared in Oglethorpe County, Georgia. At the time they came into the program, Mr. White was 50 years old and his wife was 52. They had three sons and a daughter ranging in age from 12 to 23 years. Mr. White had once owned and operated a large farm. According to local farmers who have always known him, he at one time grew as much as 50 bales of cotton annually. For several years he prospered and maintained a comparatively high level of living.

This period of prosperity ended with the ravages of the boll weevil and the coming of the depression. As conditions became more and more discouraging, Mr. White sought a new way of making a living by speculating on farms. Before long he lost everything he owned, including his own home. He then attempted to farm by renting land, but because he was able to make so little in comparison to the amount he had made in the past, he ceased to put forth his best effort. In 1938 he stopped farming and tried to make a living by hauling with an old truck. There was very little hauling to be done and people were slow in paying him, so this attempt was unsuccessful. By the fall of 1938 Mr. White was desperate and the outlook for his family appeared hopeless. As a last resort, he thought, Mr. White made application for FSA assistance. He secured a 5-year lease on a fairly good 200-acre farm, and farm and home plans were worked out with the family.

The year before they came into the program this family had 1 cow, 18 chickens, no horses, no hogs; but in 1940 they had 3 cows, 3 heifers, 253 chickens, 2 mules, 2 brood sows, and 1 hog. Whereas in 1938 they had stored no food and canned only 12 quarts, in 1940 they stored 640 pounds of food and canned 249 quarts. The value of stored foods increased during this period from none to \$126. Mr. White also had acquired tools and equipment, including a wagon, a mower, and a rake, necessary to carry out good farming practices.

As the farm was suited to livestock production, more emphasis has been placed on feed production, cows, hogs, and chickens than on the long-practiced cash-crop farming with cotton. The main crops in 1940 consisted of 7 acres of oats, 6 acres of wheat, 5 acres of green manure and cover crops, 4 acres of lespedeza, 4 acres of Austrian peas, and 10 acres of cotton.

This family was given a sanitation grant of \$93 in 1939 which was used to screen the doors, windows, and back porch of their house and to provide a sanitary toilet and a well. Water previously used by the family was carried from a spring located a considerable distance from the house.

The health of the family has been greatly improved. As a result of their participation in the medical program, all of the members were given a complete physical examination in the spring of 1939. In keeping with recommendations made at that time, Mr. White has been fitted with glasses and dentures, treated for arthritis, and given a Wasserman test. Mrs. White has been fitted with glasses. The oldest son has had several

teeth filled, has been circumcised, and has had an interview with the physician regarding asthma treatments. Another son, now in the Navy, had a tonsil and a varicose vein operation. The youngest son has had much better health since having his tonsils removed.

The entire family has worked hard. They have been very cooperative and have attained a higher level of living than any other family in this project group.

Thurston County, Washington

The Browns are a thrifty hardworking Finnish family. The father is 44 years old, the mother 40, the daughter 20, and the two sons are 17 and 18 years old. Mr. and Mrs. Brown were born and reared on farms in Michigan. Mr. Brown, who had previously been engaged in farming for a considerable time, worked from 1925 to 1932 in a mine in Michigan. After this he was unable to find steady employment and for some time the family received relief. In 1936 they moved to Thurston County, Washington, and undertook to buy a 32-acre strip of uncleared land on a contract basis. Unable to secure private employment, Mr. Brown finally resorted to WPA work. Although they wanted to return to farming and develop their land, they were afraid to give up the WPA job as it was the only security they had. They remembered previous periods of unemployment and knew what it meant to be without even a meager income. As soon as he was laid off WPA, the family decided to return to farming and applied for help under the noncommercial program.

Their participation in the program started in May 1939. The farm supervisor obtained an adjustment in the purchasing contract for their land; in fact, the contract holder agreed to cancel the contract and issue a deed to the property and take a mortgage on it.

The family has been very ingenious in obtaining their buildings at low cost. They found an old house in a nearby town which was to be wrecked and arranged to buy it for \$20. Although they were allowed only 2 days in which to complete the job, they carefully tore the house down, even saving most of the nails, hauled it to the site they had selected on their land and constructed a four-room house with an attic. Later Mr. Brown added a back porch and built a coalbox for food. He took an old car engine, removed part of the cylinders, and connected it with a washing machine brought from Michigan. He got hold of some used railroad ties and with about \$5 for additional lumber and the use of homemade shakes, he built an excellent storage house.

The two sons have been in CCC camps but not at the same time. When at home they help with crops and in clearing land. The family has surface cleared about 6 acres during the last two winters. Mr. Brown has only one horse, but he trades with neighbors when he needs a team or machinery. He owns a shake and wood saw, and a neighbor has an old car engine. By using the old engine for power and by working together, they have been able to saw shakes for buildings and wood for fuel. They keep two cows, two heifers, one brood sow, and a flock of chickens. They have a good garden, can and store a substantial quantity of food, and raise approximately

3 acres of strawberries each year.

This family's clothing supply was badly depleted when they came into the program. Everything they have secured since then has been utilized. A statement made by Mrs. Brown recently when questioned about the family's need for clothing illustrates the conservative attitude of the family. It was washday and, although the clothing on the line was badly torn, she said, "Well, yes, Bill's shorts are quite worn. I think, though, that one is all he needs now."

The family is hospitable and always delighted when asked for the use of their home for group meetings. They have a very stabilizing effect upon others who are not so prone to face realities. At a meeting in December 1940 when home plans were being written, Mrs. Brown said, "We don't care for any other than work clothes; that's all I'm going to figure on in the plan. I think it best to get along on just what we have to have until we get our loan paid off." This remark had an excellent effect upon some others who were inclined to do a lot of wishful thinking. At another meeting, planned for work on keeping accounts, an attempt was being made to develop some way in which complete records could be more easily kept. Mrs. Brown volunteered, "Now we do it every night after supper while we are still at the table. We just get out the record book and each one of the family helps to recall what the family has spent or what has been used from the farm that day. In this way everyone knows just where we stand, and we are able to keep our records up-to-date."

Although this family has definitely moved toward rehabilitation, they cannot expect to be entirely self-supporting until they have had time to clear approximately 10 additional acres of land and to secure more livestock.

Mercer County, West Virginia

The 50-acre mountainous farm on which the Bill Smith family lives was formerly owned by Mr. Smith's father. However, acquirement was not so simple as merely falling heir to it. His parents separated and taxes on the property were allowed to become delinquent. Bill's original plan was to try to obtain ownership by paying the delinquent taxes. His mother did not approve of this plan and insisted that he wait until the property was offered for sale and then bid it in. The farm was auctioned for taxes in 1929 when, as Mrs. Smith expressed it, "things were bad." At that time Bill and his family owned two horses and four cows. To help get the money with which to bid the property in, they sold a horse and a milk cow for \$65. This sum, along with an additional \$35 obtained from other sources, was given to a friend to be used in bidding in the property. Because others were also bidding for the property, the Smiths had to pay \$365 to get the farm.

After getting it, they had much difficulty in keeping it. They lost two horses and a cow. Timber work, a previous supplemental source for cash income, dwindled until in 1937 the family was forced to ask for relief. They were given relief in the amount of \$1 a week for 3 weeks. At

this time Bill got temporary work with a road construction company. When the construction was completed he was unable to get back on the relief rolls. The family's situation appeared hopeless; then one day Mrs. Smith's brother brought news which gave a ray of hope. He said, "Jim Brown was telling me yesterday about a Government program that helps folks like you all to git on their feet, and he said he thought Bill ought to go to town and see jest what it wuz all about." Bill did as advised. After being told about the program and studying it over "he took it in his head to take a loan for some stock." At first his wife "kicked about it" because she was afraid he would lose the place but finally she decided they were going to lose the place anyhow if they didn't do something, so she agreed to cooperate in taking part in the program. A farm-and-home plan was worked out with the family. This plan included a loan of \$275 for buying 15 sheep, 1 cow, grass seed, fertilizer, fencing, and roofing.

There are nine members in the Smith family. Since this family came into the noncommercial program, one son has spent 6 months in the CCC. During the year 1940-41 Bill and two sons worked in a powder plant; this has not interfered with the farm program which has been carried on successfully by other members of the family. The farm-and-home plan has been followed closely, and the entire family takes pride in their achievements. About 18 acres of the land are being cultivated by using contour furrows and strip-cropping methods. Straw has been used to fill in and check eroded places, considerable underbrush has been cut, and 16 tons of lime and 2,700 pounds of fertilizer have been used to improve the land. Production of food for home use has been increased and many improvements have been made in the home environment. The log house has been weatherboarded, underpinned, and covered; a front porch has been added, the chimney has been repaired, and the entire house has been screened. New flooring has been laid in the kitchen and two rooms have been papered. The yard has been fenced and sown with grass, and flagstone walks have been laid; the spring has been enclosed and a sanitary toilet built. New furnishings include a kitchen cabinet, radio, and bed - the boy in the CCC bought the bed and radio.

The family did not receive any grants during 1940 and were current with their loan payments as of March 1941; progress made toward complete rehabilitation has been rapid and outstanding; the entire family has cooperated in efficiently carrying out farm-and-home plans and are proud of their achievements.

Beltrami County, Minnesota

In the early part of 1936 the Carl Field family moved from Little Rock, Iowa, to Beltrami County, Minn. The year before they had operated a rented farm in that community. Mr. Field, who was 27 years old, had a common-school education, and his 26-year-old wife had had 2 year's training in a teachers' college. Their son was 2 years old and their daughter was 2 weeks old.

They bought three milk cows with wages from private work after they came to Beltrami County. The heifer calves from these cows were retained so that by 1939 they had six cows. As these cows were of a scrub type and

were poorly fed, they gave little milk and the money it brought was not enough to maintain the family.

Unable to get work or income from any other source, they had to depend on Mr. Field's parents, who lived in the same township, for help. With their aid, Mr. Field made the initial payment on 160 acres of undeveloped land. Although it was a tract of wooded wilderness, it gave the family a sense of security - they owned a piece of land with potentialities, they were encouraged, and life seemed more meaningful.

But the financing of farm improvements was more difficult than they had anticipated and their enthusiasm for the unimproved farm land began to wane. There was no chance for private work and renting an improved farm with adequate buildings in this part of the country was almost unheard of. Bewildered, but determined, the family did the best they could under these circumstances; they leased a farm close to their own with fair buildings but with few acres of cropland. The income from the rented farm was so meager the family was forced to ask for relief and, after a short time, Mr. Field was given WPA employment.

Discouraged, afraid of debts, and of being dropped from WPA rolls, the Fields hesitated to apply for aid under the experimental farm program. The income from WPA work at least offered a bare existence. Although the FSA program offered just the opportunity they had longed for, it took considerable courage to run the risk of losing their WPA job by participating in this new venture. The plight of this family was discussed with WPA officials who were cooperative and sympathetic. It was agreed that the Field family's job would not be jeopardized by their participation in the FSA program so long as the FSA supervisor believed that this supplementary income was necessary in getting the family started on their farm.

A substantial loan was made to this family on August 28, 1939 to be used in developing and improving their farm. Little time was lost in starting improvements even though Mr. Field continued to work on WPA. Using his spare time, he began land clearing immediately. His brother helped him to cut logs and clear land. The building of the farm house was started during the latter part of September and was completed in time for them to celebrate Christmas in their new home - a modern story-and-a-half house, 24 by 26 feet, with a full basement. Next, a 10 by 16 foot garage was built and used as a temporary sheep shed that winter. During the crop year 1940-41 a new barn was built. By capitalizing on his own labor and by using native lumber these farm buildings were constructed at a momentous saving to the family. The present appraised value of the buildings is twice as great as the actual cash cost to the family. Mr. Field paid for the finished materials used in these buildings by working in a sawmill operated by the local lumber dealer.

Since entering the noncommercial FSA program in 1939, the attainments of this family have been noteworthy. With their own labor they cleared 30 acres of land, cut 1,000 fence posts, constructed 480 rods of new fence, cut and custom-sawed 13,000 feet of logs, cut and sawed 1,000 cedar butts into shingles, cut and marketed 20 cords of wood, greatly

curtailed cash expenditures for family living through increased home production of food, kept the principal and interest payments on their loan current, increased their net worth over 100 percent, and progressed to a point where they are almost self-supporting. Faith in their ability to do for themselves has been revived, and they have attained a sense of security that is strongly reflected in plans for the future of their children.

Reynolds County, Missouri

Because the difficulties of this family have involved individual and social problems as well as economic stress, their progress toward the ultimate goal of complete rehabilitation has not been so rapid as that of families who were handicapped by only economic strain. Nevertheless, when considered on the basis of improvement and satisfactory adjustments effected, their advance has been perhaps as great if not greater than that of any other project family in this county.

Mr. Grey was born in Arkansas 31 years ago; Mrs. Grey was born in Kentucky one year later but moved to Arkansas in her early childhood and was living there at the time of her marriage. Since their marriage they have moved frequently in search of work. Part of the time they tried to farm but with little success because Mr. Grey drank heavily and neglected his crop.

Before coming into the FSA program in 1939 Mr. Grey had WPA work, but a large part of his wages had been spent for liquor. He was irresponsible and lacked the stability of character normally possessed by a mature person. He frequently left home without telling his family where he was going; in February he had been gone 6 weeks without communicating with his family.

Mrs. Grey, on the other hand, is responsible, ambitious, a good planner, and possesses a normal degree of stability.

The landlord from whom they were renting at the time they came into the program in 1939 required them to plant all cropland in corn. He received one-half of the quantity produced as rent. Mrs. Grey and the children did all the work in the garden and most of the work on the crop. Mr. Grey drifted aimlessly about with seemingly no hope or wish to ever accomplish anything for himself or his family. Attempts made by the supervisor in trying to get Mr. Grey to accept his responsibilities and help plan for the rehabilitation of his family had been futile. At last he was told that until he was ready to cooperate, no more assistance would be forthcoming. His neighbors tried to persuade him to cooperate, but he stubbornly refused.

Mrs. Grey said that, in their search for another place, most of the landlords they talked with would not permit them to have a garden or chickens; without them she felt the family would starve. As a last resort, they borrowed \$10 and bought 40 acres of wild land. Mrs. Grey said, "We was sick of dragging around from pillar to post with nothing; the children

said they'd rather be like Robinson Crusoe and live on a pile of rock, just so it was ours. Well, during the first year we was on our farm we did live just about like a bunch of Robinson Crusoes, but we liked it so much better than having to worry about where we was going to move to and having to give the landlord most everything we worked hard to make."

After getting the land Mr. Grey borrowed \$50 from his father, bought lumber to build a house and metal roofing to cover it; the metal roofing was bought on an installment plan.

When the family moved into their new quarters in the early part of February 1940 there were no fences, no water was available on the farm, and there were no buildings other than the box-type house which had been hurriedly built from rough lumber with no wall covering nor partitions. Spaces cut for doors were covered with pieces of cardboard. The house was surrounded with cutover timberland, and the nearest neighbor was about a half-mile away.

Shortly after the family moved in, Mr. Grey left, unannounced, in the midst of a severe snowstorm. He went to Arkansas to visit his father. The condition of the family at this time seemed utterly hopeless. The livestock was near starvation and the seven children had little to eat other than a few vegetables canned the summer before. During the absence of Mr. Grey, the FSA supervisors resumed work with the family and made them a subsistence grant. While he was gone his wife and boys cleared about 2 acres of land for garden and truck crops. When he returned, he said, "I left home because I was fed up with everything." He was called on to cooperate with his family and the supervisors in working out plans for the 1940-41 crop year. The necessity of completing a cellar and cistern before fall was discussed. A crop plan was worked out and a pledge of cooperation drawn up. In this pledge of cooperation, signed by Mr. Grey in March 1940, he agreed to finish a cellar already begun and to complete a cistern by October. It was definitely understood that failure to fulfill this pledge would mean that the family would no longer be given subsistence grants. At first he was reluctant about completing the cellar. However, when the grant check was withheld, he finished making the cellar in a few days. Then he started work on the cistern. As soon as it was deep enough for the dirt to be removed with a windlass, the supervisor helped him for a day. Since then Mr. Grey has been very cooperative and has accomplished many things. His crop was harvested in due time, he sold surplus livestock the farm would not support, and the income from it was used to pay old store bills and make a payment on his loan. During the winter he built a small barn and cleared and fenced 8 acres of land. He earned additional money by helping build a two-room addition to a neighbor's house.

Whereas in March 1940 this family seemed to be living without hope, in March 1941 they are enthusiastically planning for a brighter future. The oldest boy has changed particularly. In 1940 he was a picture of dejection; he lived a life without hope or pleasure. Today, he is full of zest and enthusiasm and has regained belief in the ability of his family to attain security for themselves. The change in the attitude of the father has been remarkable. He no longer drinks as he used to and he is accepting his responsibilities as the head of his family.

The groundwork for the complete rehabilitation of this family appears to have been satisfactorily laid, and if they continue to progress as they did during the 1940-41 crop year, they can definitely be expected to become self-supporting citizens and an asset to their community.

Knox County, Kentucky

John White was born in Clay County, Ky., in 1881. His parents moved to Knox County when he was 12 years old. During the crop years John worked with his father, who was a tenant farmer of very meager means, and he worked at whatever odd jobs he could find during the fall and winter. When he was 24 he married a 19-year-old orphan, who was reared in Knox County. He continued to farm and save his meager earnings from wages he made between crops.

At the age of 31 he bought 40 acres of land, most of it being timbered hill land. Because of poor drainage he could do nothing with the level land other than cut swamp hay in the fall. He cleared 20 acres of hill land and farmed it year after year without using soil-improvement methods. The fertility of the soil was gradually depleted until finally it would not produce more than 10 to 15 bushels of corn per acre.

It became impossible for John to support his wife and eight children with the income from the farm, so he abandoned farming and got work with a pipeline company. During the several years he worked for this and other companies, the farm (including the level land) was allowed to become covered with swamp alders and other bushes. By 1939 outside employment had dwindled, and John was again faced with the problem of trying to make a living from his neglected, worn-out farm.

He had heard about the FSA experimental farm program but was afraid his participation would encumber his land to such an extent that he would never be able to get out of debt. After the program was thoroughly explained to him, he was convinced it provided the opportunity he needed to become self-supporting. Having reached this decision and getting his loan, he started to work on the farm, cooperating in every respect with the supervisors and county agent.

In the spring of 1939 he cleared his creek channels, grubbed the swamp alders from 10 acres of swamp land, and "shrubbed off" his pasture. In addition, he cut and covered approximately 1,000 feet of ditches. He then applied 500 pounds of 20 percent phosphate and 1 ton of burned lime per acre on all of his low land, and 500 pounds of 20 percent phosphate and one-half ton of burned lime per acre of hill land.

In the spring of 1941, John sowed 1 acre of red clover and seeded half of his pasture land to a mixture of pasture grasses and legumes. In order to develop a good sod he does not plan to pasture this land until the spring of 1942; then he plans to pasture this half of the hill land and sod the other half to the same mixture. On the remainder of his level land, which heretofore has been growing only swamp hay, he has a nice crop of corn which, as a result of drainage and basic treatment, is expected to produce from 40 to 50 bushels of corn per acre during the 1941-42 year.

Before the family participated in the program, they grew only beans, onions, potatoes, and tomatoes in their garden. These were grown in small quantities and only a very few were ever canned for winter use. When the first farm-and-home plan was worked out with Mrs. White, she had 26 quarts of fruits and 27 quarts of vegetables on hand, whereas, when the plan for 1940-41 was made, she had 113 quarts of vegetables, 30 quarts of tomatoes, and 94 quarts of fruits, and they had stored parsnips, turnips, cabbage, squash, pumpkins, white potatoes, sweet potatoes, and pie melons. During the 1941-42 crop year the family had a very fine garden in which they grew 26 varieties of vegetables and a number of small fruits and berries were available.

In 1940 they painted, underpinned, and screened their house, built a cellar and a sanitary toilet, and improved their poultry house and well. They take great pride in what they have done and much interest in improving the general appearance of the place; flowers are carefully cultivated and outbuildings have been whitewashed. Mr. White recently said, "I figure it's only right when we've been helped by the Government to show our appreciation and interest by cleaning up, painting, and whitewashing. We're trying to do everything we can to improve ourselves and our farms, so anyone can see at a glance that we are getting ahead."

This family has utilized efficiently all aid and advice given them. Since coming on the program in 1939, they have made outstanding progress: their net worth has increased from \$1,250 to \$2,050, they made their payments for 2 years in advance, and had enough chattels in March 1941 to pay the balance if they were called on to do so. They have regained a sense of security and their complete rehabilitation within a short time appears to be assured.

El Pueblo Village, San Miguel County, New Mexico

The Spanish culture of the sixteenth century, mingled with the primitive ideas of the early settlers, still lingers in El Pueblo Village and has a strong bearing upon the present life of many rural folk in New Mexico.

If one were to visit the village of El Pueblo before sunrise, he would find Don Antonio Neveria bustling about doing the morning chores. He is proud that, although he is nearly 90 years old, he is still able to help his son, Gaspar, do many things. While Gaspar and his wife, Antonia, are busy, he takes care of his grandchildren. He lives in the past and relates fascinating stories of the glorious days of the Spanish Dons. He recently said, "Before our land grant was taken from us, we were able to make a comfortable living by raising livestock and cultivating irrigated land in the river valley. When my father died, I inherited a good sum of money which he had saved from the sale of livestock. With this money and the crops raised on my little farm, I was able to keep my family fairly well for a few years but since the loss of our range land we have experienced a downfall."

This sturdy old man with primitive ideas had encouraged his son to try to make a living from the 5 acres of land he owned. But the son soon found it impossible to support his wife and seven children from what he could produce on this small acreage without supplementing it with outside earnings.

Gaspar's earnings from WPA work supplied no more than bare necessities for the family. Effects of malnutrition in the physical appearance of the little children could be seen at a glance. Their cow and horse had to be shared with neighbors because they were unable to feed them. Their four-room adobe house was crumbling to ruin. Home furnishings were old and scanty. The whole scene was wrapped in an atmosphere of depression and extreme poverty.

At the inception of the noncommercial FSA program, a meeting was held to explain the experimental program to the people of El Pueblo village. Gaspar was unable to attend but his wife was present. She expressed interest in the project and said she was going to try to influence her husband to give up his WPA job and take part in the program. Her influence had immediate results; with his last WPA salary check Gaspar bought a horse and started to operate his farm again. Through a supervised grant program he received assistance to cover living expenses, to buy seed, and to carry on farm operations.

They planted a well-balanced garden, bought baby chicks, built a poultry house, and planted a family orchard. During that summer of 1939 Mrs. Neveria learned to use a pressure cooker, and since then she has preserved from 500 to 600 quarts of vegetables and fruits annually. They built a storage room with adequate shelves for their abundant supply of canned food. They now own three cows, a flock of chickens, and enough hogs to supply the family with pork and lard.

The old adobe mound has been transformed into a comfortable dwelling; the walls have been rebuilt, plastered, and whitewashed. The family no longer drinks water from irrigation ditches but has the use of a cooperative well which was constructed under sanitary specifications by a group of families. For the first time in their lives all members of the family have been immunized against contagious diseases and are participating in a group medical service.

Last year the family got enough money from the sale of wood and of meat, eggs, and other food products to repay \$50 they had borrowed the year before to pay delinquent taxes. They are producing an average of \$350 worth of food per year--their yearly cash living expenses average \$280. Their future cash income will be increased considerably through the sale of livestock which they plan to have range in the cooperative community pasture.

Since their participation in the noncommercial program this family has developed a much brighter outlook on life. The family is healthier, has made noteworthy economic progress, and may eventually be able to contribute toward the Nation's war effort.

Length of participation in the F.S.A. noncommercial
program, by counties as of March 1941

| County and State | : Average for : total no. mos. : on program : | : Percentage on program, spec. perd. | | |
|----------------------|--|--------------------------------------|--|-------------------------------|
| | | : Less than : one year : | : One year : but less : than two | : Two or : more : years |
| | | | | |
| | | | | |
| Laurens, Ga. | NA | — | 2 | 98 |
| Oglethorpe, Ga. | 28 | 4 | 6 | 90 |
| Knox, Ky. | 27 | 3 | 51 | 46 |
| Beltrami, Minn. | 17 | 25 | 66 | 9 |
| Reynolds, Mo. | 26 | 6 | — | 94 |
| San Miguel, New Mex. | 26 | — | 24 | 76 |
| Orange, Vt. | 17 | 31 | 41 | 28 |
| Grayson, Va. | 14 | 44 | 40 | 16 |
| Thurston, Wash. | 16 | 17 | 61 | 22 |
| Hercer, West Va. | 20 | 10 | 50 | 40 |
| Total, all counties | 21 | 13 | 36 | 51 |

